20. Land Use

20.1 Introduction

This chapter describes the existing land uses for the Extended, Secondary, and Primary study areas. It also describes the planned land uses (according to the Tehama, Glenn, and Colusa County general plans) because Project facilities are proposed to be constructed in those counties. Descriptions and maps of these three study areas are provided in Chapter 1 Introduction.

The regulatory setting for land use is discussed briefly in this chapter, and is presented in greater detail in Chapter 4 Environmental Compliance and Permit Summary.

This chapter focuses primarily on the Primary Study Area. Potential impacts in the Secondary and Extended study areas were evaluated and discussed qualitatively. Potential local and regional impacts from constructing, operating, and maintaining the alternatives were described and compared to applicable significance thresholds. Mitigation measures are provided for identified significant or potentially significant impacts, where appropriate.

20.2 Environmental Setting/Affected Environment

20.2.1 Extended Study Area

20.2.1.1 Methodology

Existing available documents were reviewed to characterize the existing land uses in the Extended Study Area.

20.2.1.2 Central Valley Project and State Water Project Service Areas

The Extended Study Area consists of the Central Valley Project (CVP) and the State Water Project (SWP) service areas located in northern and southern California. Land use in these areas varies considerably, depending on location, and includes agricultural, residential, commercial, industrial, and open space (which includes the wildlife refuges).

The CVP, operated by Reclamation, stores and delivers water within 29 of the State's 58 counties, through the following facilities (considered industrial land uses): 21 reservoirs; 11 powerplants; 500 miles of major canals; and conduits, tunnels, and associated facilities (Reclamation, 2011). In the Central Valley, most municipal and industrial (M&I) service contract water use occurs near the cities of Redding and Sacramento and in some towns and cities in the San Joaquin Valley to meet the demand from those residential, commercial, and industrial land uses. Outside of the population centers of the San Francisco Bay Area and Sacramento and Stockton metropolitan areas, most of the CVP service area is rural, with irrigated agriculture representing the predominant land use (Reclamation, 2011).

SWP is a water storage and delivery system that is operated and maintained by DWR. The SWP stores and delivers water through the following facilities (considered industrial land uses): 34 storage facilities, reservoirs, and lakes; 20 pumping plants; four pumping-generating plants; five hydroelectric power plants; and approximately 701 miles of open canals and pipelines (DWR, 2013a). The SWP service area comprises almost 25 percent of California's land area and more than 66 percent of its population. SWP water is used primarily for agricultural purposes (750,000 acres of irrigated farmland - mainly southern San Joaquin

Valley); the remaining water is used primarily on lands developed for residential, commercial, and industrial purposes.

20.2.1.3 San Luis Reservoir

San Luis Reservoir is located 12 miles west of the City of Los Banos in Merced County. It is a part of the San Luis Joint-Use Complex, which serves both the CVP and SWP (DWR, 2013b). The reservoir is located on all or portions of 28 parcels of land. Recreation and undeveloped open space comprise the land uses of the lands that surround the reservoir.

20.2.2 Secondary Study Area

20.2.2.1 Methodology

To characterize the land uses within the Secondary Study Area, a review of maps and aerial photography, existing available documents and websites of applicable agencies was conducted. Tehama County was contacted to obtain assessor's parcel number and Williamson Act contract information. General Plan land use designations were obtained by reviewing the County General Plan Land Use Map. The County designated land use describes the general type of land use that is allowed in a given area.

In addition, the California Department of Conservation, Office of Land Conservation's Farmland Mapping and Monitoring Program (FMMP) data were obtained and reviewed for the Red Bluff Pumping Plant site. The 2008 FMMP data set was used because this data was closest in date to the June 2009 baseline date. The FMMP Program inventories farmlands and classifies them according to their suitability for agricultural production as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, Other Land, or Water. These classifications are described below:

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Farmland of Statewide Importance: Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Unique Farmland: Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance:** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. The county-specific Board of Supervisors has the authority to adopt or recommend changes to this category of farmland.
- **Grazing Land:** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in Cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

- **Urban/Built-Up Land:** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- Other Land: Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and waterbodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
- Water: Perennial water bodies with an extent of at least 40 acres.

20.2.2.2 Counties within the Secondary Study Area

Land use within the 22 counties of the Secondary Study Area varies greatly because of differences in population, economy, and environment; land uses include agricultural, residential, commercial, industrial, recreational, and undeveloped open space.

Urban development (i.e., residential, commercial, and industrial land uses) is concentrated around the State capitol of Sacramento, as well as in Sacramento County and in the counties of Solano, Contra Costa, Alameda, Santa Clara, San Mateo, San Francisco, Marin, and Sonoma, as well as in the Sacramento-San Joaquin Delta. Commercial and industrial land uses within Shasta, Tehama, Colusa, and Glenn counties are concentrated along transportation corridors. Land use in Del Norte, Humboldt, and Trinity counties is greatly influenced by the amount of public and Native American tribal lands, much of which is used for timber production and other natural resource-related uses (USFWS, et al., 1999).

The counties within the Secondary Study Area also have lands that are dedicated to operation of the CVP and SWP waterbodies, with recreation and open space land uses being the primary land uses surrounding the waterbodies.

Land uses surrounding Trinity Lake and Whiskeytown Lake are primarily open space with some recreation. Open space land use surrounds Lewiston Lake and Keswick Reservoir and is along the Klamath River downstream of the Trinity River, Spring Creek, and Clear Creek. Land uses along the Trinity River consist primarily of open space with some rural residential and recreation. Land uses surrounding Shasta Lake include open space, recreation, residential, commercial, and industrial.

Land uses along the Sacramento River consist primarily of agriculture from Shasta County to Sacramento, with some recreation and open space. Several wildlife refuges also exist along the Sacramento River corridor. The Tehama-Colusa (T-C) Canal is located downstream of the Red Bluff Pumping Plant (RBPP) on the west bank of the Sacramento River in Tehama County. The T-C Canal is owned by Reclamation and is operated by the Tehama-Colusa Canal Authority (TCCA). TCCA delivers water to agricultural land uses to approximately 150,000 acres of land within Tehama, Glenn, Colusa, and Yolo counties (TCCA, 2013). The T-C Canal facilities are an industrial land use.

The Glenn-Colusa Irrigation District (GCID) Canal is located approximately 80 miles north of the City of Sacramento in Tehama, Glenn, and Colusa counties. The GCID Canal is owned and operated by GCID, providing water to agricultural land uses within its district boundaries that include 175,000 acres in the Sacramento Valley (GCID, 2013). The GCID Canal facilities are an industrial land use.

The Feather River supplies water to the SWP via Lake Oroville, near the city of Oroville in Butte County. Land uses along the Feather River and at/near Lake Oroville include agricultural, residential, commercial, industrial, recreational, and open space. The Thermalito Complex (the Thermalito Diversion Dam, Diversion Dam Powerplant, Power Canal, Forebay, Pumping/Generating Plant, and Afterbay) is located downstream from Oroville Dam. The land use adjacent to these facilities is open space.

Land uses at and near the Sutter Bypass and Yolo Bypass channels include agriculture, open space, and wildlife refuges, including the Sutter National Wildlife Refuge and the Yolo Bypass Wildlife Area.

The American River supplies water to the CVP via Folsom Lake in Placer, El Dorado and Sacramento counties. Land uses along the American River and at/near Folsom Lake include residential, commercial, industrial, recreational, and open space. Lake Natoma (a regulating reservoir for releases from Folsom Lake) is located downstream of Folsom Lake. Land uses near Lake Natoma include primarily open space and recreation, with some residential and office uses.

The Sacramento-San Joaquin Delta (Delta) is located at the confluence of the Sacramento and San Joaquin rivers and consists of channels and sloughs that flow into Suisun Bay, San Pablo Bay, and then San Francisco Bay before entering the Pacific Ocean. The Delta and bays are undergoing rapid urbanization associated with substantial population growth in the Bay Area and Central Valley regions. Other land uses in these areas include agricultural, rural residential, open space, and recreational.

20.2.2.3 Red Bluff Pumping Plant

The RBPP, located on the Sacramento River approximately two miles southeast of the City of Red Bluff in unincorporated Tehama County, is owned and operated by Reclamation. It is located on one parcel of land that is designated General Industrial¹ in the Tehama County General Plan (Tehama County, 2013). The RBPP site is an industrial land use that is located on FMMP-designated Urban/Built-Up land.

20.2.3 Primary Study Area

20.2.3.1 Methodology

Data, including a list of the assessor's parcels required for each Project facility (including the Project Buffer), the required acreage of each Assessor's Parcel Number; the County zoning designations of the parcels; the FMMP land use designations of the parcels, and the Project facilities that would be located on parcels that have a Williamson Act contract and/or a Wetlands Reserve Program (WRP) easement (pursuant to the Natural Resources Conservation Service) were reviewed. Provided below is a summary of that data by Project facility grouping. The information provided below is for the Project facility groupings plus the areas around the facility groupings that would be needed for Project construction activities, except for the Project Buffer. The Project Buffer would not have a construction disturbance area, but is included in this discussion to characterize the Existing Setting in that area.

20.2.3.2 Glenn and Colusa Counties

The Primary Study Area is located within Colusa and Glenn counties. These two counties are primarily rural with low populations, when compared to the remainder of California. There are a few small

¹ The intent of the General Industrial land use classification is to provide for industrial land uses, including light and heavy manufacturing, industrial parks, support wholesale energy production, related office uses, and industrial uses of similar character. This designation allows for non-industrial firms that provide materials and services related to industrial uses. Additional non-industrial uses may be permitted on an interim basis with conditions that provide for reversion to industrial uses.

incorporated cities and several unincorporated areas in these counties. Surrounding the developed communities are farms, ranches, and orchards (i.e., rural residential and agricultural land uses).

Glenn County

Glenn County is located in the western portion of the Sacramento Valley, north of Colusa County. Glenn County is approximately 849,000 acres in size, with approximately 68 percent in agriculture, 31 percent considered "other land2", and less than 1 percent in urban (i.e., residential, commercial, and/or industrial) land uses in 2010 (DOC, 2013).

In 2010, Glenn County had 348,147 acres of Important Farmlands (including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance) and an additional 226,837 acres of grazing land. Between 2008 and 2010, Important Farmlands decreased by 11 acres and grazing land decreased by 554 acres in Glenn County (DOC, 2013).

Colusa County

Colusa County is located in the western portion of the Sacramento Valley. The county is approximately 740,000 acres in size, with approximately 76 percent in agriculture, 23 percent considered "other land", and less than 1 percent in urban (i.e., residential commercial, and/or industrial land uses in 2010 (DOC, 2013).

In 2010, Colusa County had 554,695 acres of Important Farmlands (including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance), and an additional 9,161 acres of grazing land. Between 2008 and 2010, Important Farmlands decreased by 1,023 acres and grazing land increased by 50 acres in Colusa County (DOC, 2013).

20.2.3.3 Primary Study Area Project Facility Locations

Data, including a list of the assessor's parcels required for each Project facility (including the Project Buffer), the required acreage of each Assessor's Parcel Number (APN); the County zoning designations of the APNs; the FMMP land use designations of the APNs, and the Project facilities that would be located on APNs that have a Williamson Act contract and/or a WRP easement were reviewed. Provided below is a summary of that data by Project facility grouping. The information provided below is for the Project facility groupings plus the areas around the facility groupings that would be needed for Project construction activities, except for the Project Buffer. The Project Buffer would not have a construction disturbance area, but is included in this discussion to characterize the Existing Setting in that area.

Sites Reservoir Inundation Area and Sites Reservoir Dams

The proposed Sites Reservoir (either the Alternative A 1.27-MAF Reservoir or the Alternatives B and C 1.81-MAF Reservoir), the sites of the dams that would be required for the three alternatives (nine dams for Alternative A and 11 dams for Alternatives B and C), and seven borrow areas for the Project would be located within Antelope Valley in unincorporated Glenn and Colusa counties. Construction activities for these facilities would occur within a 1,000-acre area located to the east of Sites Reservoir.

The Sites Reservoir Inundation Area for all three alternatives would inundate the town of Sites in unincorporated Colusa County. The town of Sites was established in the late 1800s; it is currently a rural

² Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines or borrow pits; and waterbodies smaller than 40 acres. Includes vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres.

and sparsely populated area, with an estimated population of 17 to 20 people (Colusa County, 2013). Sites are considered a Populated Place³ by the U.S. Geological Survey (USGS GNIS, 2012).

Assessor's Parcels

The 1.27-MAF Sites Reservoir, associated dams (Alternative A), the borrow areas, plus the construction disturbance area to be located outside of Sites Reservoir would be located on all or portions of nine parcels of land in Glenn County, on all or portions of 128 parcels of land in Colusa County, and on all or portions of up to 12 additional parcels for which locations have not been determined.

The 1.81-MAF Sites Reservoir, associated dams (Alternatives B and C), the borrow areas, plus the construction disturbance area to be located outside of Sites Reservoir would be located on all or portions of eleven parcels of land in Glenn County, on all or portions of 136 parcels of land in Colusa County, and on all or portions of up to 12 additional parcels for which locations have not been determined.

Wetland Reserve Program Status

The proposed Sites Reservoir (both reservoir sizes), the dams required for the reservoir, the borrow areas, and the construction disturbance area to be located outside of Sites Reservoir would not be located on parcels of land that have WRP easements.

County Zoning Designations

Sites Reservoir and dams (Alternatives A, B, and C), the borrow areas, and the construction disturbance area to be located outside of Sites Reservoir would be located on lands that are zoned as Agricultural Preserve⁴ (144-acre minimum) and Foothill Agricultural/Forestry⁵ (144-acre minimum) in Glenn County, and Agriculture Preserve⁶, Exclusive Agriculture⁷, and Foothill Agricultural/Forestry (144-acre minimum) in Colusa County.

- To provide areas for extensive agricultural activities
- To protect the timber and forest lands economically suitable for logging

³ A Populated Place is defined as a place or area with clustered or scattered buildings and a permanent human population (city, settlement, town, or village). A Populated Place is usually not incorporated and be definition has no legal boundaries. However, a Populated Place may have a corresponding "civil" record, the legal boundaries of which may or may not coincide with the perceived populated place.

⁴ The Agricultural Preserve Zone is to be applied to lands which are covered by a California Land Conservation Act (Williamson Act) contract with the county for the following purposes:

To preserve the maximum amount of the limited supply of agricultural land which is necessary in the conservation of the county's
economic resources and vital for a healthy agricultural economy of the county

To protect the general welfare of the agricultural community for encroachments of unrelated agricultural uses which, by their nature, would be injurious to the physical and economic well-being of the agricultural community

⁵ The Foothill Agricultural/Forestry Zone classification is established for the following purposes:

⁶ The Agriculture Preserve Zone is intended to be applied in areas where agriculture is the natural and desirable primary land use and where the protection of agriculture from the encroachment of incompatible uses is essential to the general welfare.

⁷ The Exclusive Agriculture Zone is intended to be applied in agricultural lands with a General Plan land use designation of Agriculture-General. This Zone is to be applied to those areas where agricultural activities are the appropriate and desirable primary land use. This Zone is to be applied to those areas where the protection of agriculture from the encroachment of incompatible uses is essential to the general welfare of the county citizens. It is to help maintain, protect, enhance, and propagate the county's agricultural resources. It is to protect and maintain a viable agricultural economy in the county, and to protect agriculturalists from environmental impacts and pressures as they relate to groundwater, nonagriculture traffic, and encroachment from residential development resulting in common agriculture/residential conflicts related to noise, odors, spraying, vandalism, trespassing, and predation from wildlife habitating on nonmaintained adjacent ten-acre sized lots.

Farmland Mapping and Monitoring Program Designations

Sites Reservoir and dams (Alternatives A, B, and C), the borrow areas, and the construction disturbance area to be located outside of Sites Reservoir would be located on lands designated as Grazing Land, Local Potential Farmland, and Other Land in Glenn County, and on lands designated as Farmland of Local Importance and Other Land in Colusa County.

Williamson Act Contract Status

Sites Reservoir and dams (Alternative A), the borrow areas, and the construction disturbance area to be located outside of Sites Reservoir would be located on up to 86 parcels of land that have Williamson Act contracts. Of that total, eight contracts are with Glenn County, 66 contracts are with Colusa County, and up to 12 additional Williamson Act contracts are included for parcels for which locations have not been determined. Glenn County contracts renew on March 1 each year. Colusa County contracts renew on January 1 each year.

Sites Reservoir and dams (Alternatives B and C), the borrow areas, and the construction disturbance area to be located outside of Sites Reservoir would be located on up to 95 parcels of land that have Williamson Act contracts. Of that total, nine contracts are with Glenn County, 74 contracts are with Colusa County, and up to 12 additional Williamson Act contracts are included for parcels for which locations have not been determined.

Recreation Areas

Up to five locations were determined to be potentially feasible recreation areas at Sites Reservoir to provide recreation opportunities: Stone Corral Recreation Area (235 acres), Saddle Dam Recreation Area (329 acres), Peninsula Hills Recreation Area (373 acres), Antelope Island Recreation Area (49 acres), and Lurline Headwaters Recreation Area (219 acres) totaling 1,205 acres. All construction activities for the Recreation Areas would occur within the footprints of the individual recreation areas.

Assessor's Parcels

The Recreation Areas would be located on all or portions of four parcels of land in Glenn County and 11 parcels of land in Colusa County.

Wetland Reserve Program Status

The Recreation Areas would be located on no parcels of land that have WRP easements.

County Zoning Designations

The Recreation Areas would be located on lands that are zoned as Agricultural Preserve (144-acre minimum) in Glenn County, and Agriculture Preserve in Colusa County.

Farmland Mapping and Monitoring Program Designations

The Recreation Areas would be located on lands that are designated as Grazing Land and Local Potential Farmland in Glenn County and Farmland of Local Importance and Other Land in Colusa County.

Williamson Act Contract Status

The Recreation Areas would be located on 14 parcels of land that have Williamson Act contracts. Of that total, four contracts are with Glenn County, and 10 contracts are with Colusa County. Glenn County contracts renew on March 1 each year. Colusa County contracts renew on January 1 each year.

Road Relocations, South Bridge, and Terminal Regulating Reservoir Pipeline Road

Sites Reservoir would inundate several existing roads within Colusa County's jurisdiction; so as part of the Project (all alternatives), several roads would be rerouted to provide alternate access routes. In addition, new roads would be required to access various Project facilities. The "Road Relocations" discussed below include both the re-routed existing roads and the proposed Project roads. The South Bridge would be located within the footprint of the Sites Reservoir Inundation Area; therefore, the acreage in this discussion is limited to only the roads.

Assessor's Parcels

The Alternative A Road Relocations would be located on all or portions of 12 parcels of land in Glenn County and on all or portions of 45 parcels of land in Colusa County.

The Alternative B and C Road Relocations would be located on all or portions of 11 parcels of land in Glenn County and on all or portions of 42 parcels of land in Colusa County.

Wetland Reserve Program Status

The Road Relocations (all three alternatives) would be located on no parcels of land that have WRP easements.

County Zoning Designations

The Alternative A, B and C Road Relocations would be located on lands that are zoned as Agricultural Preserve (144-acre minimum) and Agricultural Preserve (72-acre minimum) in Glenn County, and Agriculture Preserve in Colusa County.

Farmland Mapping and Monitoring Program Designations

The Alternatives A, B and C Road Relocations would be located on lands that are designated as Farmland of Local Importance, Local Potential Farmland, Other Land, and Grazing Land.

Williamson Act Contract Status

The Alternative A Road Relocations would be located on 52 parcels of land that have Williamson Act contracts. Of that total, 11 contracts are with Glenn County, and 41 contracts are with Colusa County. Glenn County contracts renew on March 1 each year. Colusa County contracts renew on January 1 each year.

The Alternative B and C Road Relocations would be located on 48 parcels of land that have Williamson Act contracts. Of that total, 10 contracts are with Glenn County, and 38 contracts are with Colusa County.

Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and the Asphalt Batch Plant would be located to the west of the existing Funks Reservoir between it and the proposed Sites Reservoir on primarily open space lands.

Assessor's Parcels

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Asphalt Batch Plant, and associated construction disturbance area would be located on all or portions of seven parcels of land in Colusa County.

Wetland Reserve Program Status

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Asphalt Batch Plant, and associated construction disturbance area would be located on no parcels of land that have WRP easements.

County Zoning Designations

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Asphalt Batch Plant, and associated construction disturbance area would be located on lands that are zoned as Agriculture Preserve in Colusa County.

Farmland Mapping and Monitoring Program Designations

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Asphalt Batch Plant, and associated construction disturbance area would be located on lands that are designated as Farmland of Local Importance.

Williamson Act Contract Status

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Asphalt Batch Plant, and associated construction disturbance area would be located on six parcels of land that have Williamson Act contracts with Colusa County. Colusa County contracts renew on January 1 each year.

<u>Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard</u>

The Holthouse Reservoir Complex (which includes Holthouse Reservoir and Dam, breached Funks Dam, the dredging of Funks Reservoir, Holthouse Spillway and Stilling Basin, Holthouse Pumping Plant, T-C Canal Discharge Dissipater, the Funks Bypass Pipeline, and the Holthouse to T-C Canal Pipeline), the Holthouse Reservoir Electrical Switchyard, and the Delevan Pipeline Electrical Switchyard would be located on agricultural and open space lands, with the exception of Funks Reservoir and Funks Dam, which are existing facilities.

Assessor's Parcels

The Holthouse Reservoir Complex, the Holthouse Reservoir Electrical Switchyard, the Delevan Pipeline Electrical Switchyard, and associated construction disturbance area around these facilities would be located on all or portions of 14 parcels of land in Colusa County, as well as on up to 10 other parcels that are included within the Delevan Pipeline/TRR Pipeline construction disturbance area.

Wetland Reserve Program Status

The Holthouse Reservoir Complex, the Holthouse Reservoir Electrical Switchyard, the Delevan Pipeline Electrical Switchyard, and associated construction disturbance area around these facilities would be located on no parcels of land that have WRP easements.

County Zoning Designations

The Holthouse Reservoir Complex, the Holthouse Reservoir Electrical Switchyard, the Delevan Pipeline Electrical Switchyard, and associated construction disturbance area around these facilities would be located on lands that are zoned as Agriculture Preserve and Exclusive Agriculture in Colusa County.

Farmland Mapping and Monitoring Program Designations

The Holthouse Reservoir Complex, the Holthouse Reservoir Electrical Switchyard, the Delevan Pipeline Electrical Switchyard, and associated construction disturbance area around these facilities would be located on lands that are designated as Prime Farmland and Farmland of Local Importance.

Williamson Act Contract Status

The Holthouse Reservoir Complex, the Holthouse Reservoir Electrical Switchyard, the Delevan Pipeline Electrical Switchyard, and associated construction disturbance area around these facilities would be located on three parcels of land that have a Williamson Act contract with Colusa County, as well as on one other parcel that is included within the Delevan Pipeline/TRR Pipeline construction disturbance area. Colusa County contracts renew on January 1 each year.

Glenn-Colusa Irrigation District Canal Facilities Modifications

The GCID Canal is an existing irrigation canal that delivers water from the Sacramento River to irrigation districts along its route from its diversion point northwest of Hamilton City in Glenn County to southeast of Williams, in Colusa County. The proposed Project improvements include a new headgate structure, canal lining, and a railroad siphon replacement.

Assessor's Parcels

The modifications to the GCID Canal headgate structure and canal lining would be located on all or portions of one parcel of land in Glenn County.

The modifications to the GCID Canal railroad siphon would be located on all or portions of two parcels of land in Glenn County.

Wetland Reserve Program Status

The modifications to the GCID Canal headgate structure, canal lining, and railroad siphon would be located on no parcels of land that have WRP easements.

County Zoning Designations

The modifications to the GCID Canal headgate structure and canal lining would be located on lands that are identified as Canal on the Glenn County Zoning Map. The railroad siphon modifications would be located on the Canal, which does not have a zoning classification on the Zoning Map (Glenn County, 2006). The County's land use and zoning website (Glenn County, 2013) indicates that the lands encompassing the GCID Canal headgate structure, canal lining, and railroad siphon are zoned NL (meaning "no information available") and that the construction disturbance area for those facilities is zoned NL and Intensive Agriculture.

Farmland Mapping and Monitoring Program Designations

The modifications to the GCID Canal headgate structure and canal lining and associated construction disturbance area would be located on lands that are designated as primarily Other Land with a small amount of land designated as Farmland of Statewide Importance.

The modifications to the GCID Canal railroad siphon and associated construction disturbance area would be located on lands that are designated as primarily Urban/Built-Up Land, with a small amount of land designated as Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance.

Williamson Act Contract Status

The modifications to GCID Canal headgate structure, canal lining, and railroad siphon would be located on no parcels of land that have Williamson Act contracts.

Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir to Funks Creek Outlet, and Terminal Regulating Reservoir Electrical Switchyard

Water conveyed down the GCID Canal would be directed into the proposed TRR. The TRR and its associated facilities would be located on agricultural lands.

Assessor's Parcels

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, TRR Electrical Switchyard, and the construction disturbance area around these facilities would be located on all or portions of nine parcels of land in Colusa County.

Wetland Reserve Program Status

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, TRR Electrical Switchyard, and the construction disturbance area would be located on no parcels of land that have WRP easements.

County Zoning Designations

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, TRR Electrical Switchyard, and the construction disturbance area would be located on lands that are zoned as Exclusive Agriculture in Colusa County.

Farmland Mapping and Monitoring Program Designations

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, TRR Electrical Switchyard, and the construction disturbance area would be located on lands that are designated as Prime Farmland, Farmland of Local Importance, and Other Land.

Williamson Act Contract Status

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, TRR Electrical Switchyard, and the construction disturbance area would be located on no parcels of land that have Williamson Act contracts.

Delevan Pipeline and Terminal Regulating Reservoir Pipeline

The approximately 13.5-mile-long Delevan Pipeline would be routed from the Delevan Pipeline Intake/Discharge Facilities to Holthouse Reservoir for Alternatives A, B, and C. It would convey water from the Sacramento River to Holthouse Reservoir to fill Sites Reservoir, and also convey water from Holthouse Reservoir to release to the Sacramento River for Alternatives A and C. Although the Alternative B Delevan Pipeline would only convey water from Holthouse Reservoir to release to the Sacramento River, the Delevan Pipeline would have the same facility footprint for all three alternatives.

The 3.5-mile-long TRR Pipeline would convey water from the TRR to Holthouse Reservoir. The western 3.5-mile length of the Delevan Pipeline would parallel the TRR Pipeline.

Assessor's Parcels

The 10-mile-long eastern portion of the Delevan Pipeline, the TRR Pipeline, the 3.5-mile-long western portion of the Delevan Pipeline, and the construction disturbance area would be located on 64 parcels of land in Colusa County.

Wetland Reserve Program Status

The 10-mile-long eastern portion of the Delevan Pipeline and the construction disturbance area would be located on one parcel of land that has a WRP easement.

The 3.5-mile-long western portion of the Delevan Pipeline, the TRR Pipeline, and their construction disturbance area would not be located on parcels that have WRP easements.

County Zoning Designations

The 10-mile-long eastern portion of the Delevan Pipeline and the construction disturbance area would be located on lands designated as Exclusive Agriculture and Light or Heavy Industrial in Colusa County.

The 3.5-mile-long western portion of the Delevan Pipeline, the TRR Pipeline, and their construction disturbance area would be located on lands designated as Exclusive Agriculture in Colusa County.

Farmland Mapping and Monitoring Program Designation

The 10-mile-long eastern portion of the Delevan Pipeline and the construction disturbance area would be located on lands designated as Prime Farmland, Unique Farmland, and Other Land.

The 3.5-mile-long western portion of the Delevan Pipeline, the TRR Pipeline, and their construction disturbance area would be located on lands designated as Prime Farmland and Farmland of Local Importance.

Williamson Act Contract Status

The Delevan and TRR pipelines and their associated construction disturbance area would be located on 11 parcels of land that have Williamson contracts with Colusa County. Colusa County contracts renew on January 1 each year.

Delevan Transmission Line

A 230-kV Delevan Transmission Line would conduct electricity from an existing power source to provide all of the electricity needed by the Project's pumping plants.

The Delevan Transmission Line would differ between alternatives. In Alternatives A and C, it would parallel the Delevan Pipeline from the Delevan Pipeline Intake Facilities to the TRR. It would then be aligned from the TRR to the Sites Electrical Switchyard. The Alternative B Delevan Electrical Transmission Line would be aligned only from its connection with the existing PG&E 230-kV or WAPA 500-kV/230-kV transmission line to the Sites Pumping/Generating Plant. The transmission line towers (Alternatives A, B, and C) would be sited within a 150-foot-wide permanent transmission line easement.

Assessor's Parcels

The Alternatives A and C Delevan Transmission Line and associated construction disturbance area would be located on all or portions of 39 parcels of land in Colusa County.

The Alternative B Delevan Transmission Line and associated construction disturbance area would be located on all or portions of eight parcels of land in Colusa County.

Wetland Reserve Program Status

The Alternatives A and C Delevan Transmission Line and associated construction disturbance area would be located on one parcel of land that has a WRP easement.

The Alternative B Delevan Transmission Line and associated construction disturbance area would be located on no parcels of land that have a WRP easement.

County Zoning Designations

The Alternatives A and C Delevan Transmission Line and associated construction disturbance area would be located on lands designated as Agriculture Preserve and Exclusive Agriculture in Colusa County.

The Alternative B Delevan Transmission Line and associated construction disturbance area would be located on lands designated as Agriculture Preserve and Exclusive Agriculture in Colusa County.

Farmland Mapping and Monitoring Program Designation

The Alternatives A and C Delevan Transmission Line and associated construction disturbance area would be located on lands designated as Prime Farmland and Farmland of Local Importance.

The Alternative B Delevan Transmission Line and associated construction area would be located on lands designated as Farmland of Local Importance.

Williamson Act Contract Status

The Alternatives A and C Delevan Transmission Line and associated construction disturbance area would be located on 11 parcels of land that have Williamson Act contracts with Colusa County. Colusa County contracts renew on January 1 each year.

The Alternative B Delevan Transmission Line and associated construction disturbance area would be located on six parcels that have Williamson Act contracts with Colusa County.

Delevan Pipeline Intake Facilities

Alternatives A and C include a fish screen and pumping/generating facilities to divert water from the Sacramento River, and also includes a water release capability to the Sacramento River.

Assessor's Parcels

The Delevan Pipeline Intake Facilities and associated construction disturbance area would be located on all or portions of two parcels of land in Colusa County.

Wetland Reserve Program Status

The Delevan Pipeline Intake Facilities and associated construction disturbance area would be located on no parcels of land that have WRP easements.

County Zoning Designations

The Delevan Pipeline Intake Facilities and associated construction disturbance area would be located on lands designated as Exclusive Agriculture and Floodway in Colusa County.

Farmland Mapping and Monitoring Program Designation

The Delevan Pipeline Intake Facilities and associated construction disturbance area would be located on lands designated as Prime Farmland and Other Land.

Williamson Act Contract Status

The Delevan Pipeline Intake Facilities and associated construction disturbance area would be located on no parcels of land that have Williamson Act contracts.

Delevan Pipeline Discharge Facility

Alternative B includes the release-only Delevan Pipeline Discharge Facility. This alternative would provide no Sacramento River water diversion capability.

Assessor's Parcels

The Delevan Pipeline Discharge Facility and associated construction disturbance area would be located on all or portions of three parcels of land in Colusa County.

Wetland Reserve Program Status

The Delevan Pipeline Discharge Facility and associated construction disturbance area would be located on no parcels of land that have WRP easements.

County Zoning Designations

The Delevan Pipeline Discharge Facility and associated construction disturbance area would be located on lands designated as Exclusive Agriculture and Floodway in Colusa County.

Farmland Mapping and Monitoring Program Designation

The Delevan Pipeline Discharge Facility and associated construction disturbance area would be located on lands designated as Prime Farmland and Other Land.

Williamson Act Contract Status

The Delevan Pipeline Discharge Facility and associated construction disturbance area would be located on no parcels of land that have Williamson Act contracts.

Electrical Distribution Lines

The Electrical Distribution Lines would supply electricity to Golden Gate Dam, Sites Dam, South Bridge, and the Lurline Headwaters, Peninsula Hills, and Stone Corral recreation areas.

Assessor's Parcels

The Alternative A Electrical Distribution Lines and associated construction disturbance area would be located on all or portions of 16 parcels of land in Colusa County.

The Alternatives B and C Electrical Distribution Lines and associated construction disturbance area would be located on all or portions of 14 parcels of land in Colusa County.

Wetland Reserve Program Status

The Electrical Distribution Lines (Alternatives A, B, and C) and associated construction disturbance area would not be located on parcels of land that have WRP easements.

County Zoning Designations

The Electrical Distribution Lines (Alternatives A, B, and C) and associated construction disturbance area would be located on lands designated as Agriculture Preserve in Colusa County.

Farmland Mapping and Monitoring Program Designation

The Electrical Distribution Lines (Alternatives A, B, and C) and associated construction disturbance area would be located on lands designated as Farmland of Local Importance and Other Land.

Williamson Act Contract Status

The Alternative A Electrical Distribution Lines and associated construction disturbance area would be located on 16 parcels of land that have Williamson Act contracts with Colusa County. Colusa County contracts renew on January 1 each year.

The Alternatives B and C Electrical Distribution Lines and associated construction disturbance area would be located on 14 parcels of land that have Williamson Act contracts with Colusa County.

Project Buffer

The Project Buffer would consist of the land surrounding Project facility footprints, extending out to the nearest parcel boundary, to create a buffer around most Project facilities. The Delevan and TRR pipelines, Delevan Transmission Line, and Road Relocations and South Bridge would not have an associated Project Buffer, but portions of these facilities would be located within the buffer of other facilities due to their proximity to or connection with other facilities. In addition, the GCID Canal Facilities Modifications would not have an associated Project Buffer. The outer perimeter boundary of the Project Buffer would be the same for the three alternatives. Due to the differences in Project facilities between the three alternatives, the size and shape of the Project Buffer would differ between alternatives.

Assessor's Parcels

The Alternative A Project Buffer would be located on all or portions of 10 parcels of land in Glenn County and on all or portions of 102 parcels of land in Colusa County.

The Alternatives B and C Project Buffer would be located on all or portions of 10 parcels of land in Glenn County and on all or portions of 98 parcels of land in Colusa County.

Wetland Reserve Program Status

The Project Buffer (for Alternatives A, B, and C) would not be located on parcels of land that have WRP easements.

County Zoning Designation

The Alternative A, B and C Project Buffer would be located on lands that are zoned as Agricultural Preserve (144-acre minimum) and Foothill Agricultural/Forestry (144-acre minimum) in Glenn County, and as Agriculture Preserve, Exclusive Agriculture, Foothill Agricultural/Forestry (144-acre minimum), and Floodway in Colusa County.

Farmland Mapping and Monitoring Program Designation

The Alternative A, B and C Project Buffer would be located on lands designated as Grazing, Prime Farmland, Farmland of Local Importance, Local Potential Farmland, Unique Farmland, Water, and Other Land.

Williamson Act Contract Status

The Alternative A Project Buffer would be located on 81 parcels of land that have Williamson Act contracts. Of that total, eight contracts are with Glenn County, and 73 contracts are with Colusa County. Glenn County contracts renew on March 1 each year. Colusa County contracts renew on January 1 each year.

The Alternatives B and C Project Buffer would be located on 77 parcels of land that have Williamson Act contracts. Of that total, eight contracts are with Glenn County, and 69 contracts are with Colusa County.

20.3 Environmental Impacts/Environmental Consequences

20.3.1 Regulatory Setting

Land uses are inventoried at the State and local agency levels, and are regulated at the federal, State, and local agency levels. Provided below is a list of the applicable regulations. These regulations are discussed in detail in Chapter 4 Environmental Compliance and Permit Summary of this EIR/EIS.

20.3.1.1 Federal Plans, Policies, and Regulations

- U.S Department of Agriculture, Natural Resources Conservation Service Farmland Protection Policy Act of 1981
- U.S. Department of Agriculture, Natural Resources Conservation Service Wetlands Reserve Program

20.3.1.2 State Plans, Policies, and Regulations

- California Department of Conservation, Office of Land Conservation Important Farmland Inventory System and Farmland Mapping and Monitoring Program
- California Land Conservation Act of 1965 (Williamson Act)
- California State Planning and Zoning Laws

20.3.1.3 Regional and Local Plans, Policies, and Regulations

- Tehama County General Plan (2009)
- Tehama County Code (No Date)
- Glenn County General Plan (1993)
- Glenn County Code (No Date)
- Colusa County General Plan (2012)
- Colusa County Code (1991)

Several federal, State, and local land use planning and zoning, as well as agricultural conservation regulations, are in effect that are relevant to the action alternatives. The regulations are listed above and described in Chapter 4 Environmental Compliance and Permit Summary. They are also discussed briefly below to provide context for the information that is provided for the Project facilities environmental setting, as well as the impacts analysis, because several of the impact evaluation criteria in this chapter pertain to these issues.

- U.S. Department of Agriculture, Natural Resources Conservation Service Farmland Protection
 Policy Act of 1981: This Act is a federal regulation that is intended to minimize the impact of federal
 programs with respect to the conversion of farmland to nonagricultural uses. It ensures that, to the
 extent possible, federal programs are administered to be compatible with State, local, and private
 programs and policies to protect farmland.
- U.S. Department of Agriculture, Natural Resources Conservation Service Wetlands Reserve Program: The Wetlands Reserve Program (WRP) is a voluntary program that offers landowners the opportunity to protect, restore, and enhance wetlands on their property. The Program has several enrollment options. In exchange for the landowner precluding development on the lands and restoring the lands, the USDA NRCS pays certain costs to the landowner and provides technical assistance to the landowner to restore, protect, and enhance wetlands on eligible lands. Approximately 779 acres of land

in Glenn County have WRP easements; approximately 8,894 acres of land in Colusa County have WRP easements (NRCS, 2013).

- Important Farmland Inventory System and Farmland Mapping and Monitoring Program: The California Department of Conservation, Office of Land Conservation, maintains a statewide inventory of farmlands. These lands are mapped by the Division of Land Resource Protection as part of the Farmland Mapping and Monitoring Program (FMMP). Lands are classified according to their suitability for agricultural production as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, Other Land, and Water.
- California Land Conservation Act of 1965 (Williamson Act): The Williamson Act enables local governments to enter into contracts with private landowners to promote the continued use of relevant land into agricultural or related open space use by establishing agricultural preserves. In return, landowners receive property tax assessments that are based on farming and open space uses instead of full market value. The Williamson Act was enhanced in 1998 with Farmland Security Zones (also known as Super Williamson Act lands).
- California State Planning and Zoning Laws: California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement General Plans. California Government Code Section 65800 et seq. establishes that zoning ordinances, which are laws that define allowable land uses in a specific district, are required to be consistent with the General Plan and any applicable Specific Plan. The individual General Plans and zoning ordinances that are applicable to the Project are listed in Section 20.3.1.3.

20.3.2 Evaluation Criteria and Significance Thresholds

Significance criteria represent the thresholds that were used to identify whether an impact would be significant. Appendix G of the *CEQA Guidelines* suggests the following evaluation criteria for land use and planning and agriculture and forestry resources:

Would the Project:

- Physically divide an established community?
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use?
- Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- Result in the loss of forest land or conversion of forest land to non-forest use?

• Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The evaluation criteria used for this impact analysis represent a combination of the Appendix G criteria and professional judgment that considers current regulations, standards, and/or consultation with agencies, knowledge of the area, and the context and intensity of the environmental effects, as required pursuant to NEPA. For the purposes of this analysis, an alternative would result in a significant impact if it would result in any of the following:

- Physical division of an established community.
- Conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect.
- Changes in land use as a result of implementing the alternatives that are considered to be incompatible with the existing land uses at and adjacent to the proposed Project facilities.
- Permanent conversion of Prime Farmland, as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use. In contrast, temporary or non-permanent conversion (i.e., during Project construction) of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland would result in a less-than-significant impact. In addition, permanent conversion of Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland would result in a less-than-significant impact.
- Permanent conflict with existing zoning for agricultural use, and/or the permanent conversion of lands
 that have a Williamson Act contract. In contrast, temporary conflicts (i.e., during Project construction)
 with existing zoning for agricultural use, or the temporary conversion (i.e., during Project construction)
 of lands that have a Williamson Act contract would result in a less-than-significant impact if the lands
 are restored to agricultural land use and the temporary impact does not exceed three years.
- Permanent conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). In contrast, temporary conflicts (i.e., during Project construction) with existing zoning for forest land or timberland would result in a less-than-significant impact.
- The permanent loss of forest land or permanent conversion of forest land to non-forest use. In contrast, the temporary loss or conversion (i.e., during Project construction) of forest land or timberland would result in a less-than-significant impact.
- Other changes in the existing environment which, due to their location or nature, could result in the permanent conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to non-agricultural use or permanent conversion of forest land to non-forest use. In contrast, temporary conversion (i.e., during Project construction) of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland, or the temporary conversion of forest land to non-forest use would result in a less-than-significant impact.

20.3.3 Impact Assessment Assumptions and Methodology

20.3.3.1 Assumptions

The following assumptions were made regarding Project-related construction, operation, and maintenance impacts to land use:

- Direct Project-related construction, operation, and maintenance activities would occur in the Primary Study Area.
- Direct Project-related operational effects would occur in the Secondary Study Area.
- The only direct Project-related construction activity that would occur in the Secondary Study Area is the installation of an additional pump into an existing bay at the RBPP.
- The only direct Project-related maintenance activity that would occur in the Secondary Study Area is the sediment removal and disposal at the two intake locations (i.e., GCID Canal Intake and RBPP).
- No direct Project-related construction or maintenance activities would occur in the Extended Study Area.
- Direct Project-related operational effects that would occur in the Extended Study Area are related to San Luis Reservoir operation, increased reliability of water supply to agricultural, municipal, and industrial water users, and the provision of an alternate Level 4 wildlife refuge water supply. Indirect effects to the operation of certain facilities that are located in the Extended Study Area, and indirect effects to the consequent water deliveries made by those facilities, would occur as a result of implementing the alternatives.
- The existing bank protection located upstream of the proposed Delevan Pipeline Intake/Discharge facilities would continue to be maintained and remain functional.
- No additional channel stabilization, grade control measures, or dredging in the Sacramento River at or upstream of the Delevan Pipeline Intake or Discharge facilities would be required.
- Temporary impacts to land use would occur during the Project construction period. Temporary impacts would occur within a "construction disturbance area". Because land use changes could occur anywhere within each Project facility footprint once Project construction starts, and to provide a worst-case scenario of land use impacts, the construction disturbance area for every Project facility (except for the Recreation Areas) was determined to consist of (1) the Project facility footprint, plus (2) an area outside of the Project facility footprint where Project construction activities could occur, in which the following activities could include, but are not limited to, facility construction/installation, facility assembly, materials laydown/storage, soil stockpiling, borrow areas, spoils disposal areas, and/or deliveries. Because some Project facilities would be located close to other Project facilities, some of the construction disturbance areas would be used for more than one Project facility. For the Recreation Areas, the construction disturbance area was determined to be the same as the permanent disturbance area.
- Permanent impacts to land use would occur at the facility footprint of every Project facility (i.e., the
 permanent disturbance area) and would last for the period of Project analysis (i.e., 100 years).
 Permanent impacts would begin when Project construction is complete. Permanent impacts would
 occur as a result of the presence of the Project facilities, from Project facility operations and

- maintenance activities, and from the presence of the Project Buffer⁸, which could preclude some existing land uses from occurring within that area.
- Defined construction disturbance areas were available for the Delevan and TRR pipelines, Delevan
 Transmission Line, Electrical Distribution Lines, and Roads Relocations. For all other Project facilities
 (in which the coordinate space was not defined for specific proposed Project facilities or construction
 disturbance areas for the facilities), the following assumptions were developed regarding size and
 potential location.
 - Sites Reservoir Inundation Area and Sites Reservoir Dams and Borrow Areas: In addition to the acreage for the footprints of the Sites Reservoir Inundation Area and Sites Reservoir Dams and Borrow Areas, a 1,000-acre construction disturbance area would be located to the east of Sites Reservoir. The precise location has not been defined; however, the parcels of land that are being considered for this area encompass the Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard facility footprints, as well as several proposed Project roads and other parcels located near those facilities. There are seven borrow areas defined within the Sites Reservoir Inundation Area, and they are accounted for within the inundation area calculations.
 - Recreation Areas: The construction disturbance area would be the same as the permanent disturbance area (i.e., it is the footprint of each Recreation Area). All Project facilities that would be located within the Recreation Areas (e.g., roads and distribution lines) are accounted for within the Recreation Areas facility grouping.
 - Road Relocations, South Bridge, and TRR Pipeline Road: The defined construction disturbance area along all Project roads would be 200 feet wide (100 feet on both sides of the roadways' centerline except for the TRR Pipeline Road discussed below its construction disturbance area would be less); the permanent disturbance area along the roads' alignments would average approximately 60 feet wide. Portions of the proposed roads would be located within the 1,000-acre construction disturbance area associated with Sites Reservoir Inundation Area and Sites Reservoir Dams (and the other facilities listed above that are included within the 1,000 acres). Because it is uncertain which land parcels would comprise the 1,000 acres, it was determined that the footprints of the proposed roads in those parcels should be accounted for with the roads and not as part of the Sites Reservoir and Dams category listed above. The 20-foot-wide gravel inspection road from the TRR to Holthouse Reservoir and Dam (known as the TRR Pipeline Road) would generate permanent ground disturbance, and it is accounted for in these calculations.
 - Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard: The construction disturbance area for these facilities would be approximately 99 acres (90 acres of facility footprints plus an assumed 10 percent extra [i.e., 9 acres] for construction activities). This 99 acres would be located within

⁸ The Project Buffer lands would remain undeveloped; the existing vegetation would be maintained as wildlife habitat and protected from fuelwood harvest, grazing, and other forms of environmental degradation. Existing structures within the Project Buffer would be demolished and the remaining land would be managed as wildlife habitat. Existing agricultural lands would not be maintained as agriculture; they would be converted and managed as wildlife habitat.

- the 1,000 acres mentioned above for the Sites Reservoir Inundation Area and Sites Reservoir Dams, and are accounted for in those calculations.
- Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard: The construction disturbance area for these facilities would be approximately 383 acres (348 acres of facility footprints plus an assumed 10 percent extra [i.e., 35 acres] for construction activities). The 383 acres would be located within the construction disturbance area for the Delevan and TRR pipelines, and are accounted for in those calculations. The Delevan Pipeline Electrical Switchyard would generate permanent ground disturbance and is accounted for in these calculations. The total facility footprints for this grouping would be 572 acres, including 224 acres of water surface associated with the existing Funks reservoir and additional facility footprints of 348 acres for the Project facility grouping.
- Glenn-Colusa Irrigation District Canal Facilities Modifications: The construction disturbance area for these facility modifications would be approximately 0.77 acre (0.7 acre for the canal lining and headgate structure plus an assumed 10 percent extra [i.e., 0.07 acre] for construction activities) plus approximately 0.22 acre (0.2 acre for the railroad siphon plus an assumed 10 percent extra [i.e., 0.02 acre] for construction activities). The total 0.99 acre would be located within the existing GCID Canal and the existing railroad siphon area.
- Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Terminal Regulating Reservoir Electrical Switchyard, and Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir: The construction disturbance area for these facilities would be approximately 214 acres (195 acres of facility footprints plus an assumed 10 percent extra [i.e., 19 acres] for construction activities). The 214 acres would be located within the construction disturbance area for the Delevan and TRR pipelines, and are accounted for in those calculations.
- Delevan Pipeline and Terminal Regulating Reservoir Pipeline: The construction disturbance area for these underground pipelines would be 1,500 feet wide and 13 miles long. The construction disturbance area attributed to the pipelines is approximately 2,058 acres for Alternatives A and C, and 2,265 acres for Alternative B, excluding acreage that is already accounted for under other Project facility groupings. There would be permanent disturbance associated with the two pipelines from regularly spaced aboveground facilities, such as blow-off structures, air valve structures, and an outlet and energy dissipater structure. The precise locations of these structures are not currently known, so their permanent disturbance is not accounted for in this land use analysis.
- Delevan Transmission Line: The construction disturbance area for the Delevan Transmission Line would be 150 feet wide and would be located within the 1,500-foot-wide construction disturbance area for the Delevan and TRR pipelines for nine miles of their approximate 13-mile length. The remaining four-mile-long portion of the Delevan Transmission Line that would not overlap with the Delevan and TRR pipeline construction disturbance area would result in approximately 71 acres of construction disturbance area. The permanent disturbance associated with the Delevan Transmission Line was calculated to be approximately 2.5 acres for Alternatives A and C and 0.5 acre for Alternative B, and was based on an assumed number of towers and an assumed disturbance needed for the footings of each tower (70 towers for Alternatives A and C and 15 towers for Alternative B). Because the precise locations of the towers is not known, it was

assumed that land use impacts from the tower footings could occur anywhere along the 13-mile-long transmission line alignment. That assumption meant that the precise parcel of land, and its associated zoning, FMMP land use designation, and Williamson Act contract status could not be determined, resulting in presenting "potentially affected parcels" in the land use analysis, which would result in an overstatement regarding the number of parcels that would be affected, and a worst-case presentation of compatibility with existing zoning, FMMP land use designations, and Williamson Act contracts.

- Electrical Distribution Lines: Distribution lines to supply electricity to three of the Recreation Areas would be located within the Lurline Headwaters, Peninsula Hills, and Stone Corral recreation areas and have been accounted for within the Recreation Areas facility grouping. Other distribution lines that would be needed for the Project (e.g., for Golden Gate Dam, Sites Dam, and South Bridge) and connections to the Recreation Areas (but located outside of the Recreation Areas) are included in this Electrical Distribution Lines facility grouping.
- Delevan Pipeline Intake Facilities (Alternatives A and C): The permanent disturbance area (i.e., facility footprint) would be approximately 19.1 acres. The construction disturbance area for this facility would be smaller than the facility footprint (it would be approximately 17.1 acres) because approximately two acres of the facility footprint overlaps with the Delevan Pipeline construction disturbance area, and the two acres are accounted for in those calculations. In addition, the portion of the Delevan Pipeline construction disturbance area that is near to the Delevan Pipeline Intake Facilities is assumed to also be used for Delevan Pipeline Intake Facilities construction activities.
- Delevan Pipeline Discharge Facility (Alternative B): The permanent disturbance area (i.e., facility footprint) would be approximately 7.7 acres. The construction disturbance area for this facility would be smaller than the facility footprint (it would be approximately 6.3 acres) because approximately 1.4 acres of the facility footprint overlaps with the Delevan Pipeline construction disturbance area, and the 1.4 acres are accounted for in those calculations. In addition, the portion of the Delevan Pipeline construction disturbance area that is near to the Delevan Pipeline Discharge Facility is assumed to also be used for Delevan Pipeline Discharge Facility construction activities.
- Project Buffer: The Project Buffer would consist of the land that would be acquired for the Project beyond the facility footprints, out to the nearest existing parcel boundaries. The Project Buffer would surround Sites Reservoir, the Holthouse Reservoir Complex, and all facilities located between these two facilities; the Terminal Regulating Reservoir and associated facilities; and the Delevan Pipeline Intake/Discharge facilities⁹. Because the Project Buffer boundary would follow existing parcel boundaries, the width of the buffer around Project facilities would vary. The acreage for the temporary land use impacts of the Project Buffer would be zero; the changes in land use from creating this buffer (including fence construction, structure demolition, and fuelbreak creation) are considered a permanent land use impact.

⁹ The Delevan Transmission Line and the Delevan Pipeline would not have an associated buffer. These two Project facilities do not require additional lands for long-term operation and maintenance.

20.3.3.2 Methodology

For the Extended Study Area, Project operational modeling results were reviewed to determine the expected changes in water deliveries and what those changes could mean relative to existing land uses.

For the Primary Study Area, the methodology used for assessing changes to land use, compatibility with Zoning and FMMP land use designations, and Williamson Act contract and WRP easement status of parcels that would be potentially affected by Project facilities (all three alternatives) was a multi-step process.

Project facilities that would be located near each other were grouped to prevent double-counting acreages. Acreages of the groups and associated construction disturbance areas around them were calculated using GIS. In instances where the coordinate space was not defined for specific proposed Project facility footprints or construction activity areas, assumptions were made regarding size and potential location.

The following Project facilities had spatially defined construction disturbance areas: Delevan and TRR pipelines, Delevan Transmission Line, Electrical Distribution Lines, and Road Relocations. For all other Project facilities (except for Sites Reservoir and the Project Buffer), the construction disturbance area associated with Alternatives A, B, and C was calculated as the Project facility footprint plus additional acreage that was added to the facility footprint (an assumed 10 percent of the facility footprint). Because the 10 percent additional acreage could be located in any area surrounding a Project facility, "potentially affected" parcels were identified and a list was created through a mapping review of the adjacent and overlapping parcel data.

To calculate permanent disturbance to land uses from the Project (Alternatives A, B, and C), the Project facility groupings were combined using a Union tool in GIS, which enabled all overlap between permanent facility footprints and the Project Buffer to be defined and eliminated prior to comparison with the agency datasets (i.e. Zoning, FMMP land use designations, Williamson Act contract status, and WRP easement status).

Subsequently, the consistency of Project facilities (including construction, operation, and maintenance activities) with the Zoning FMMP designated land uses and the counties' General Plans' policies was evaluated. In addition, the parcels where Project facilities would be constructed that have Williamson Act contracts and/or WRP easements were identified. Finally, the compatibility of Project facilities (including construction, operation, and maintenance activities) with existing land uses at and near those facility locations was evaluated.

It should be noted that the acreages presented in this chapter do not match acreages presented in other chapters in this EIR/EIS for every Project facility. This discrepancy is due to the necessary difference in methodology used to account for temporary and permanent impacts for the various environmental resources.

20.3.4 Topics Eliminated from Further Analytical Consideration

San Luis Reservoir is not discussed in the Extended Study Area for the No Project/No Action Alternative and Alternatives A, B, and C because changes to San Luis Reservoir storage conditions would have no effect on any of the land use issues being evaluated in this chapter.

Because no Project facilities would be constructed or maintained within the Extended Study Area for Alternatives A, B, and C, only operational impacts were discussed in the impacts analysis for the Extended Study Area (i.e., construction and maintenance impacts were not discussed).

The Secondary Study Area is not discussed for the No Project/No Action Alternative and Alternatives A, B, and C, as related to Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Sacramento River, Clear Creek, Lake Oroville, Thermalito Complex (Thermalito Diversion Pool, Thermalito Forebay, and Thermalito Afterbay); Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; and San Francisco Bay because reservoir storage conditions and flow regime changes of those CVP/SWP reservoirs, rivers, creeks, and associated floodplains would have no effect on land use issues.

Land use changes and their compatibility with existing and General Plan designated land uses (**Impact Land-3**) are not relevant to the Primary Study Area for the No Project/No Action Alternative (and are, therefore, not discussed) because the projects and programs that are included in the No Project/No Action Alternative are not located within the Primary Study Area.

Established communities (**Impact Land-1**) are not discussed for the Primary Study Area for Alternatives A, B, and C except in the Sites Reservoir Inundation Area and Sites Reservoir Dams discussion; that criterion is not relevant to any other Project facility. The Town of Sites (which exists within the proposed footprint of the Sites Reservoir Inundation Area) is the only established community within the Primary Study Area.

20.3.5 Impacts Associated with the No Project/No Action Alternative

20.3.5.1 Extended Study Area – No Project/No Action Alternative

Construction, Operation, and Maintenance Impacts

Agricultural Water Use, Municipal and Industrial Water Use, and Wildlife Refuge Water Use

Operational modeling of the No Project/No Action Alternative indicates that the change in CVP agricultural water supply deliveries between the No Project/No Action Alternative and Existing Conditions would range between -17 and 1 percent (indicating that the change could range from a decrease to a slight increase, when compared to Existing Conditions), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared. The change in SWP agricultural water supply deliveries between the No Project/No Action Alternative and Existing Conditions is predicted to range between -6 and 0 percent (indicating that the change could be a minor decrease ranging to no change, when compared to Existing Conditions), also depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared (refer to Chapter 6 Surface Water Resources for details).

Operational modeling of the No Project/No Action Alternative indicates that the change in CVP M&I water supply deliveries between the No Project/No Action Alternative and Existing Conditions would range between 0 and 149 percent (indicating that there could be no change and ranging to a substantial increase), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared. The change in SWP M&I water supply deliveries between the No Project/No Action Alternative and Existing Conditions is predicted to range between -11 and 4 percent (indicating that the change could be a decrease ranging to a slight increase, when compared to Existing Conditions), also depending on

hydrologic region and whether long-term averages or Dry and Critical averages are compared (refer to Chapter 6 Surface Water Resources for details).

Impact Land-1: Physical Division of an Established Community

The No Project/No Action Alternative includes implementation of projects and programs being constructed, or those that have gained approval, as of June 2009. With implementation of the No Project/No Action Alternative, CVP and SWP agricultural and M&I water supply deliveries within the Extended Study Area are predicted to change, when compared to Existing Conditions.

Operational modeling indicates that agricultural water deliveries (either CVP or SWP) in the Extended Study Area are predicted to decline or be approximately the same. These changes could result in a reduction in agricultural production, but not necessarily fewer acres of land in agricultural land use over the long-term, and not necessarily a change in land use from agriculture to another developed use. Reduced agricultural production could include, but may not be limited to, fewer acres of land cropped during Dry water years (i.e., periodic land fallowing), growing less water-intensive crops, or cropping land parcels fewer times per year.

CVP M&I water deliveries are expected to increase substantially in the Sacramento Valley and San Francisco Bay hydrologic regions; no change is expected in the San Joaquin River and Tulare Lake hydrologic regions. SWP M&I water deliveries are expected to decline or increase slightly throughout the hydrologic regions.

CVP Level 4 water deliveries to the wildlife refuges are expected to increase with implementation of the No Project/No Action Alternative, when compared to Existing Conditions. Changes in water deliveries to the wildlife refuges, whether they are increases or decreases, would not affect established communities because wildlife refuges do not have residential, commercial, and/or industrial development within their boundaries.

Regardless of the expected changes (increase or decrease) in water deliveries throughout the Extended Study Area as a result of implementing the No Project/No Action Alternative, the impacts of the projects included in the No Project/No Action Alternative have already been evaluated on a project-by-project basis, pursuant to CEQA and/or NEPA, and their potential for impacts to existing land uses has been addressed in those environmental documents. Therefore, **there would not be a substantial adverse effect** on established communities, when compared to Existing Conditions.

Population growth is expected to occur in California throughout the period of Project analysis (i.e., 100 years), and is included in the assumptions for the No Project/No Action Alternative. Urbanization that is planned according to County and City General Plans and zoning codes could be expected to cause the conversion of open space, agricultural, and rural residential land uses to M&I land uses (i.e., residential, commercial, industrial land uses). However, the General Plans and related construction activities would be subject to their own environmental reviews. Therefore, population growth associated with implementation of the No Project/No Action Alternative would not have a substantial adverse effect on established communities, when compared to Existing Conditions.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with land use plans, policies, and regulations.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing Land Uses at and Adjacent to the Proposed Project Facilities

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential land use changes associated with the projects and programs included in the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to farmland conversions.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with agricultural use zoning and Williamson Act Contracts.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with forest land and timberland zoning.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to forest land conversions.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to farmland and forest land conversions.

20.3.5.2 Primary Study Area – No Project/No Action Alternative

Impact Land -1: Physical Division of an Established Community

If the No Project/No Action Alternative is implemented, the Project would not be constructed, and there would, therefore, be no construction, operation, or maintenance impacts within the Primary Study Area. Therefore, **there would not be a substantial adverse effect** on established communities, when compared to Existing Conditions.

Land uses that currently exist within the Primary Study Area, including, but not limited to, residential, agricultural, open space, and grazing, are expected to continue. Growth that may occur within the Primary Study Area, and its associated land uses, is expected to be in accordance with Glenn and Colusa counties' General Plans. Therefore, **there would not be a substantial adverse effect**, when compared to Existing Conditions.

In addition, projects included within the No Project/No Action Alternative would not be located within the Primary Study Area, and therefore, **would not have a substantial adverse effect**, when compared to Existing Conditions.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with land use plans, policies, and regulations.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to farmland conversions.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with agricultural use zoning and Williamson Act Contracts.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with forest land and timberland zoning.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to forest land conversions.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to farmland and forest land conversions.

20.3.6 Impacts Associated with Alternative A

20.3.6.1 Extended Study Area – Alternative A

Operation Impacts

With implementation of Alternative A, CVP and SWP agricultural water supply deliveries within the Extended Study Area are predicted to change, when compared to Existing Conditions and the No Project/No Action Alternative.

Project operational modeling indicates that the change in CVP agricultural water supply deliveries between Alternative A and Existing Conditions would range between -8 and 3 percent (indicating that the change could be a minor decrease ranging to a slight increase, when compared to Existing Conditions), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared. The change in SWP agricultural water supply deliveries between Alternative A and Existing Conditions is predicted to range between -1 and 9 percent (indicating that the change could be a slight decrease to a slight increase), also depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared (refer to Chapter 6 Surface Water Resources for details).

Project operational modeling also indicates that the change in CVP agricultural water supply deliveries between Alternative A and the No Project/No Action Alternative would range between 2 and 11 percent (indicating that the change could be an increase up to a minor amount), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared. The change in SWP agricultural water supply deliveries between Alternative A and the No Project/No Action Alternative would range between 0 and 13 percent (indicating that there could be no change, ranging to a minor increase), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared (refer to Chapter 6 Surface Water Resources for details).

Agricultural Water Use

Impact Land -1: Physical Division of an Established Community

Alternative A's potential to increase agricultural water supply reliability and increase deliveries to agricultural land uses in the Extended Study Area is not likely to result in land use agencies within those jurisdictions planning to develop lands into agricultural land uses because much of the change in water deliveries is focused on the driest years (increasing water supply reliability thus decreasing the probability of developing additional acres of agricultural land uses). It is predicted that 19,000 fewer acres of agricultural land would result, when comparing Alternative A to Existing Conditions, and 2,000 additional acres of agricultural land are predicted to result when comparing Alternative A to the No Project/No Action Alternative (refer to Chapter 22 Socioeconomics for information regarding the 19,000-acre decrease and associated increase in crop production value, as well as the 2,000-acre increase and associated increase in crop production value).

The applicable land use agency would determine the plan for the land development in its community. Planned changes in land use, including those that would physically divide an established community if that was to occur, would undergo environmental review and approval, pursuant to CEQA and/or NEPA. This would, therefore, result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Land use changes that may occur within the Extended Study Area as a result of increased agricultural water supply reliability and increased water deliveries would be subject to applicable land use plans, policies, and regulations of the agency with jurisdiction over the lands where the land use changes could occur. Environmental analyses pursuant to CEQA and/or NEPA of such land use changes, if they were to occur, would include the review of relevant adopted zoning ordinances, General Plans, and maps for consistency with such regulations. Providing increased agricultural water supply reliability and deliveries within the CVP/SWP service areas of the Extended Study Area would not cause conflicts with these jurisdictional

analyses. Therefore, **no impact** would occur, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Refer to the **Impact Land-2** discussion. That discussion is also applicable to the compatibility of land use changes expected as a result of Project implementation with existing and General Plan-designated land uses.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Providing increased agricultural water supply reliability and deliveries within the CVP/SWP service areas, as a result of implementation of Alternative A, is not expected to result in the conversion of FMMP-designated Farmland to a non-agricultural use. If that were to occur, environmental analyses pursuant to CEQA and/or NEPA of such land use changes would occur. There would be a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of lands that have a Williamson Act Contract

Providing increased agricultural water supply reliability and deliveries within the CVP/SWP service areas would not result in a conflict with the existing Agricultural zoning in the counties located within the Extended Study Area. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Providing increased agricultural water supply reliability and deliveries within the CVP/SWP service areas is not expected to affect forest land or forest land production because, as indicated in the **Impact Land-1** discussion, there would be little change expected to land uses (due to Alternative A's focus on providing water supply reliability) as a result of implementation of Alternative A, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, Alternative A is not expected to result in a conflict with the existing zoning of forest land in the counties located within the Extended Study Area. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-6** discussion. That discussion is also applicable to forest land conversions.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide

Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-4**, **Impact Land-5**, and **Impact Land-6** discussions. That discussion is also applicable to farmland and forest land conversions.

Municipal and Industrial Water Use

With implementation of Alternative A, CVP and SWP M&I water supply deliveries within the Extended Study Area are predicted to change, when compared to Existing Conditions and the No Project/No Action Alternative.

Project operational modeling indicates that the change in CVP M&I water supply deliveries between Alternative A and Existing Conditions would range between 0 and 151 percent ¹⁰ (indicating that there could be no change and ranging to a substantial increase), depending on hydrologic region and whether long-term averages or Dry and Critical ¹¹ averages are compared. The change in SWP M&I water supply deliveries between Alternative A and Existing Conditions is predicted to range between 0 and 9 percent (indicating that the change could range from no change to a minor increase, when compared to Existing Conditions), also depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared (refer to Chapter 6 Surface Water Resources for details).

Project operational modeling also indicates that the change in CVP M&I water supply deliveries between Alternative A and the No Project/No Action Alternative would range between 0 and 1 percent (indicating that there could be no change or a slight change), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared. The change in SWP M&I water supply deliveries between Alternative A and the No Project/No Action Alternative would range between 5 and 16 percent (indicating that the change could be a slight to minor increase, when compared to Existing Conditions), depending on hydrologic region and whether long-term averages or Dry and Critical averages are compared (refer to Chapter 6 Surface Water Resources for details).

Impact Land -1: Physical Division of an Established Community

Alternative A's potential to increase M&I water supply reliability and increase deliveries to M&I land uses in the Extended Study Area could result in land use agencies within those jurisdictions planning to develop lands into M&I land uses, although much of the change in water deliveries would occur during the driest years (increasing water supply reliability and decreasing the probability of developing additional acres of M&I land uses). This is not expected to induce growth; it is instead expected to accommodate growth that is planned by local land use agencies. The applicable land use agency would determine the plan for the land development in its community. Planned changes in land use, including those that would physically divide an established community, would undergo environmental review and approval, pursuant to CEQA and/or NEPA. This would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

¹⁰ It should be noted that the majority of this change would occur between Existing Conditions and the No Project/No Action Alternative, with a minor amount of change expected to occur between the No Project/No Action Alternative and Alternative A.

¹¹ It should be noted that much of the change would occur during the driest years (i.e., Project water would be provided during those years to provide reliability), so additional acreage may not be converted to M&I land uses.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

If land use agencies approve land use changes as a result of Alternative A's potential to increase water supply reliability and increase deliveries to M&I land uses in the Extended Study Area, those land use changes would be expected to comply with that agency's land use plans, policies, and regulations, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Refer to the **Impact Land-2** discussion. That discussion is also applicable to the compatibility of land use changes expected as a result of Project implementation with existing and General Plan-designated land uses.

Impact Land-4: Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

If land use agencies approve land use changes as a result of Alternative A's potential to increase water supply reliability and increase deliveries to M&I land uses in the Extended Study Area, and those land use changes result in the conversion of FMMP-designated Farmland to a non-agricultural use, those proposed land use changes would undergo environmental review and approval, pursuant to CEQA and/or NEPA. This would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, or the Permanent Conversion of Lands that have a Williamson Act Contract

If land use agencies approve land use changes as a result of Alternative A's potential to increase water supply reliability and increase deliveries to M&I land uses in the Extended Study Area, those land use changes would be expected to comply with that agency's existing zoning and applicable Williamson Act Contract provisions, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

If land use agencies approve land use changes as a result of Alternative A's potential to increase water supply reliability and increase deliveries to M&I land uses in the Extended Study Area, those land use changes would be expected to not conflict with zoning for forest land or timberland, or with timberland production. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-6** discussion. That discussion is also applicable to forest land conversions.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-4**, **Impact Land-5**, and **Impact Land-6** discussions. Those discussions are also applicable to farmland and forest land conversions.

Wildlife Refuge Water Use

Impact Land -1: Physical Division of an Established Community

The provision of an alternate Level 4 wildlife refuge water supply, associated with implementation of Alternative A, would have no effect on established communities within the Extended Study Area. This is because Alternative A would continue to provide this water (an alternative source to what is currently provided) only to lands within the wildlife refuges. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

No conflicts are expected with land use plans, policies, or regulations that are applicable to the Extended Study Area from the continued delivery of water to the wildlife refuges because only the water source would potentially change. The action (water delivery), location of water delivery, and amount of water to be delivered would not change. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Refer to the **Impact Land-1** discussion. That discussion is also applicable to the compatibility of land use changes expected as a result of Project implementation with existing and General Plan-designated land uses.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to farmland conversions.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with agricultural use zoning and Williamson Act Contracts.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Refer to the **Impact Land-1** discussion. That discussion is also applicable to potential conflicts with forest land and timberland zoning.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to forest land conversions.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-1** discussion. That discussion is also applicable to farmland and forest land conversions.

20.3.6.2 Secondary Study Area - Alternative A

Construction, Operation, and Maintenance Impacts

Pump Installation at the Red Bluff Pumping Plant

Alternative A includes the installation of a pump into an existing concrete bay at the existing RBPP. The proposed additional pump would not increase the frequency of maintenance activities that are currently required at the pumping plant.

Impact Land -1: Physical Division of an Established Community

The RBPP is located within the land use footprint of an existing CVP facility owned and operated by Reclamation. No physical division of an established community would, therefore, occur as a result of the construction, operation, or maintenance of an additional pump or the maintenance dredging required for the Project. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

No conflicts with the Farmland Protection Policy Act, NRCS' WRP, and applicable Tehama County General Plan policies are expected (refer to Chapter 4 Environmental Compliance and Permit Summary for the list of applicable policies) from installing the Project pump into the existing RBPP. In addition, maintenance of the Project pump and dredging of the canal would occur when maintenance of the other RBPP facilities occurs, resulting in no conflicts. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Because the Project pump would be installed within the existing RBPP on land that is designated General Industrial by Tehama County, no changes in land use at the RBPP or adjacent parcels would occur as a result of the construction, operation, or maintenance of the pump, or maintenance dredging required for the Project. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

The existing RBPP (in which the pump is proposed to be installed) is not located on land that is FMMP-designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; it is located on land that is designated as Urban/Built-Up. In addition, the Project's pump installation at the RBPP, as well as the pump's operation and maintenance and canal maintenance dredging required for the Project, would not require conversion of the existing FMMP-designated land use of the pumping plant site. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Because the Project pump would be installed within the existing RBPP site (land that is not zoned for agricultural use and does not have a Williamson Act contract), the pump's installation, operation, and maintenance, as well as canal maintenance dredging required for the Project, would not conflict with zoning for agricultural use or Williamson Act contract provisions. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Because the Project pump would be installed within the existing RBPP site (land that is not zoned for forest land, timberland, or timberland production), the pump's installation, operation, and maintenance, as well as canal maintenance dredging required for the Project, would not conflict with zoning for forest land or timberland, or with timberland production. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-6** discussion. That discussion is also applicable to forest land conversions.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-4**, **Impact Land-5**, and **Impact Land-6** discussions. Those discussions are also applicable to farmland and forest land conversions.

20.3.6.3 Primary Study Area - Alternative A

Construction, Operation, and Maintenance Impacts

Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge

As part of Project construction, 22 residences, four detached garages, one mobile home, 26 barns, and 37 other structures (a combination of sheds, silos, and a pump house) within the Sites Reservoir Inundation Area would be demolished. Existing septic tanks and other storage tanks would also be removed. In addition, two private cemeteries (Sites Cemetery and a Rancheria Cemetery) would be relocated, as well as many miles of fencing and asphalt would be removed. The roads that are currently routed through Antelope Valley would be re-routed, as necessary to provide alternate routes.

Table 20-1 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Sites Reservoir, Sites Reservoir Dams, and South Bridge.

Table 20-1
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge – Alternative A
Land Use Summary

Land Use Summary		
Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Glenn County	9	9
Colusa County	128	128
Undetermined ^c	12	0
Total	149	137
Acreage of Potentially Affected Parcels		
Glenn County	1,795	1,795
Colusa County	10,669	10,669
Undetermined ^c	1,000	0
Total	13,464	12,464
Zoning Designation of Potentially Affected Parcels (Acres) Glenn County		4.500
Agricultural Preserve (144-acre minimum) Foothill Agriculture/Forestry (144-acre minimum) Colusa County		1,592 182
Agriculture Preserve Exclusive Agriculture Foothill Agriculture/Forestry (144-acre minimum) N/A Total	13,464 ^d	10,535 33 7 115 12,464
FMMP Designation of Potentially Affected Parcels (Acres)	10,101	,
Glenn County		
Local Potential Farmland Grazing Land Other Land Colusa County		1,042 727 6
Farmland of Local Importance Other Land Total	13,464 ^d	10,582 107 12,464

Table 20-1
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	8	8
Colusa County	66	66
Undetermined ^c	12	0
Total	86	74
Acreage of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County		1,606
Colusa County		9,286
Total	11,892 ^d	10,892
Number of Potentially Affected Parcels with WRP	0	0
Easements		
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

Impact Land -1: Physical Division of an Established Community

Project construction includes the demolition of existing structures within Antelope Valley, the construction of dams to form Sites Reservoir, the construction of the South Bridge across the reservoir, and the filling of the reservoir. These activities would eliminate the town of Sites. Therefore, construction of Sites Reservoir (i.e., creating the inundation area), Sites Dams, and South Bridge would cause the physical division of an established community, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

No conflicts with the Farmland Protection Policy Act and NRCS' WRP are expected. The goals, objectives, and policies included in Glenn County's and Colusa County's General Plan land use elements have a strong focus on the preservation of agricultural land uses (refer to Chapter 4 Environmental Compliance and Permit Summary for the list of applicable policies). Colusa County's General Plan Land Use Element (Goal LU-4 and associated objectives and policies) also provide for the creation of Sites Reservoir, including action items to create a Sites Area Plan and the County's active participation in the Sites Joint Power Authority. Construction, operation, and maintenance of the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge would, therefore, result in a **significant impact**, as related to Glenn County's

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cUndetermined values represent construction disturbance areas for which locations have not been determined. Reported undetermined values are the maximum number of additional parcels or acreages that would be temporarily affected.

^dThe temporarily affected acreages by zoning and FMMP designations, and by Williamson Act contracts, cannot be determined because it is unknown which parcels would comprise the 1,000-acre construction disturbance area. Reported total temporarily affected acreages are the sum of the permanently affected acres and the 1,000-acre construction disturbance area.

General Plan, and a **less-than-significant impact**, as related to Colusa County's General Plan, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Construction, operation, and maintenance of the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge would result in changes in the existing agricultural, rural residential, and open space land uses, as well as to the General Plan-designated land uses from Glenn and Colusa County land use designations that promote agricultural land uses to recreational and public facility/industrial land uses. These expected changes in land use would be compatible with the existing surrounding land uses, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative. However, the expected changes would result in a **significant impact**, as related to the designated land uses, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

The Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge would not result in the conversion of FMMP designated Prime Farmland to nonagricultural uses because this land use type does not occur in this area. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Construction, operation, and maintenance of Sites Reservoir, its associated dams, and South Bridge would conflict with the zoning of land in Glenn County that is currently zoned as Agricultural Preserve and Foothill Agriculture/Forestry, and Agriculture Preserve, Exclusive Agriculture, and Foothill Agriculture/Forestry (144-acre minimum) in Colusa County. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, up to 86 parcels of land that have Williamson Act contracts would be affected during Project construction (a **less-than-significant impact**), and 74 parcels of land that have Williamson Act contracts would be affected during Project operation and maintenance. This permanent long-term impact would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

In Glenn County, the applicable zoning designations are Foothill Agricultural/Forestry, Agricultural Preserve, or Recreational (Murrey, 2012). The zoning designations used in Colusa County for areas defined as Forest Land, Timberland, or Timberland zoned Timberland Production are Open Space, Upland Conservation, or Agriculture Preserve (Johanns, 2012).

Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge would impact 1,774 acres currently zoned as Agricultural Preserve and Foothill Agriculture/Forestry in Glenn County and 10,542 acres of land designated as Agriculture Preserve and Foothill Agriculture/Forestry (144-acre minimum) in Colusa County. This would result in a zoning conflict, and would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-6** discussion. Due to the land being zoned for forest land, and because it is currently unknown how many of the acres of forest land that are currently zoned Agricultural Preserve, Foothill Agriculture/Forestry, and Agriculture Preserve, this is considered a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge would change the existing environment of lands designated pursuant to the FMMP as Farmland of Local Importance and Local Potential Farmland. Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge would also change the existing environment of lands zoned as Foothill Agriculture/Forestry. These changes would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Recreation Areas

Table 20-2 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Recreation Areas.

Table 20-2
Recreation Areas – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Glenn County	4	4
Colusa County	11	11
Total	15	15
Acreage of Potentially Affected Parcels		
Glenn County	293	293
Colusa County	877	877
Total	1,170	1,170
Zoning Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Agricultural Preserve (144-acre minimum)	293	293
Colusa County		
Agriculture Preserve	877	877
Total	1,170	1,170

Table 20-2 Recreation Areas – Alternative A Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Local Potential Farmland	61	61
Grazing Land	232	232
Colusa County		
Farmland of Local Importance	811	811
Other Land	66	66
Total	1,170	1,170
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	4	4
Colusa County	10	10
Total	14	14
Acreage of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	293	293
Colusa County	828	828
Total	1,121	1,121
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. Construction, operation, and maintenance of the Saddle Dam Recreation Area, which would be located in Glenn County, would result in a **significant impact**, as related to Glenn County's General Plan, when compared to Existing Conditions and the No Project/No Action Alternative. Construction, operation, and maintenance of the remaining four recreation areas that would be located in Colusa County would result in a **less-than-significant impact**, as related to Colusa County's General Plan, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Refer to the **Impact Land-3** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Recreation Areas.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

No Prime Farmland would be affected by construction, operation, or maintenance of the Recreation Areas because no Prime Farmland is located at the Recreation Area sites. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Construction, operation, and maintenance of the Recreation Areas would conflict with the zoning of land in Glenn County that is currently zoned as Agricultural Preserve, and Agriculture Preserve in Colusa County. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, up to 14 parcels of land that have Williamson Act contracts would be affected during Project construction (a **less-than-significant impact**), and during Project operation and maintenance. This permanent long-term impact would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Refer to the **Impact Land-6** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Recreation Areas (acreages applicable to Recreation Areas are provided in Table 20-2).

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-7** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Recreation Areas (acreages applicable to Recreation Areas are provided in Table 20-2).

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-8** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Recreation Areas.

Road Relocations and Terminal Regulating Reservoir Pipeline Road

Table 20-3 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing and operating/maintaining the Alternative A Road Relocations and TRR Pipeline Road.

Table 20-3
Road Relocations and Terminal Regulating Reservoir Pipeline Road – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Glenn County	12	13
Colusa County	45 ^d	39
Total	57	52
Acreage of Potentially Affected Parcels		
Glenn County	215	81
Colusa County	670	206
Total	885	287
Zoning Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Agricultural Preserve (144-acre minimum) Agricultural Preserve (72-acre minimum) N/A	131 68 16	55 15 11
Colusa County		
Agriculture Preserve	668	206
N/A	2	0°
Total	885	287
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Local Potential Farmland Grazing Land Other Land	87 128 0°	30 51 0°
Colusa County		
Farmland of Local Importance Other Land	669 0°	206 0
Total	885	287
Number of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	11	12
Colusa County	41	36
Total	52	48
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	195	69
Colusa County	648	198
Total	843	267
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

Table 20-3 Road Relocations and Terminal Regulating Reservoir Pipeline Road – Alternative A Land Use Summary

Descriptor Temporary Impacts^a Permanent Impacts^b

^dDifferences between temporary and long-term acreages for these categories are due to the TRR Pipeline Road being located within the Delevan and TRR Pipeline disturbance area, thus having no construction disturbance area of its own. This also applies to the differences in the number of parcels affected.

Notes

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. The Colusa County discussion is also applicable to portions of the Road Relocations and the entire length of the TRR Pipeline Road. The portions of the Road Relocations that would be constructed, operated, and maintained in Glenn County would result in a **significant impact**, as related to Glenn County's General Plan, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

Refer to the **Impact Land-3** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Road Relocations and TRR Pipeline Road.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

No Prime Farmland would be affected by construction, operation, or maintenance of the Road Relocations and TRR Pipeline Road because no Prime Farmland is located along those alignments. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Operation and maintenance of the Road Relocations and TRR Pipeline Road would conflict with the zoning of land in Glenn County that is currently zoned as Agricultural Preserve, and Agriculture Preserve in Colusa County. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, up to 52 parcels of land that have Williamson Act contracts would be affected during Project construction (a **less-than-significant impact**), and 48 parcels of land that have Williamson Act contracts

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is less than one acre in these categories, but more than zero.

would be affected during Project operation and maintenance. This permanent long-term impact would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Refer to the **Impact Land-6** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Road Relocations and TRR Pipeline Road (acreages applicable to Road Relocations and TRR Pipeline Road are provided in Table 20-3).

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Site visits to the area did not reveal forest land that would be affected by the Project. Therefore, there would be no permanent loss of forest, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Road Relocations and TRR Pipeline Road would change the existing environment of lands designated pursuant to the FMMP as Farmland of Local Importance, and Local Potential Farmland (acreages are presented in Table 20-3). This would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant

Table 20-4 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing and operating/maintaining the Alternative A Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant.

Table 20-4
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites
Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure,
Field Office Maintenance Yard, and Asphalt Batch Plant – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	Oc	7
Acreage of Potentially Affected Parcels		
Colusa County	O _c	89
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Agriculture Preserve	Oc	89
Total	0 °	89

Table 20-4 Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant – Alternative A Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Farmland of Local Importance	0c	89
Total	0 c	89
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Colusa County	Oc	6
Total	0 c	6
Acreage of Potentially Affected Parcels with Williamson Act		
Contracts		
Colusa County	Oc	79
Total	0 c	79
Number of Potentially Affected Parcels with WRP	0	0
Easements		
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant, as that discussion pertains to Colusa County.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The construction and operation/maintenance of the Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant would result in changes in the existing agricultural and open space land uses, as well as to the General Plan-designated land uses from Colusa County land use designations that promote agricultural land uses to public facility/industrial land uses. These expected changes in land use would be compatible with the existing surrounding land uses, resulting in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cAll construction disturbance area numbers for this Project facility grouping are zero because the construction disturbance area for this grouping would be within the Sites Reservoir construction disturbance area. It is noted that the actual construction disturbance area for this grouping would be 99 acres within the 1,000-acre construction disturbance area (90 acres plus 10 percent).

Action Alternative. The expected changes would result in a **significant impact**, as related to the designated land uses, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

No Prime Farmland in Colusa County would be affected by construction, operation, or maintenance of the Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant because these Project facilities would not be located on Prime Farmland. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Construction, operation, and maintenance of the Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant would conflict with the zoning of land in Colusa County that is currently zoned as Agriculture Preserve. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, no parcels of land that have Williamson Act contracts would be affected during Project construction (due to these facilities being constructed within the construction disturbance area of the Sites Reservoir Inundation Area and Sites Reservoir Dams), which would result in a **less-than-significant impact.** Six parcels of land that have Williamson Act contracts would be affected during Project operation and maintenance. This permanent long-term impact would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant would impact 89 acres designated Agriculture Preserve in Colusa County. This would result in a zoning conflict, and would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Site visits to the area did not reveal forest land. Therefore, there would be no permanent loss of forest, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant would change the existing environment of lands designated pursuant to the FMMP as Farmland of Local Importance (acreages are presented in Table 20-4). This would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard

Table 20-5 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard.

Table 20-5
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard – Alternative A Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	0c	14
Acreage of Potentially Affected Parcels		
Colusa County	0c	348
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Agriculture Preserve	0c	92
Exclusive Agriculture	0°	256
Total	0 c	348
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Prime Farmland	Oc	115
Farmland of Local Importance	O _c	233
Total	0 °	348
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	0°	3
Total	0 c	3
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	0°	5
Total	0 c	5
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

Table 20-5 Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard – Alternative A Land Use Summary

Descriptor Temporary Impacts^a Permanent Impacts^b

Notes

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard, as that discussion pertains to Colusa County.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The construction, operation, and maintenance of the Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard would result in changes in the existing agricultural and open space land uses (but not to the water land use of Funks Reservoir), as well as to the General Plan-designated land uses from Colusa County land use designations that promote agricultural land uses to public facility/industrial land uses. These expected changes in land use would be compatible with the existing surrounding land uses, resulting in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative. The expected changes would result in a **significant impact**, as related to the designated land uses, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Approximately 115 acres of Prime Farmland in Colusa County would be affected by operation and maintenance of the Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Construction, operation, and maintenance of the Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard would conflict with the zoning of land in

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cAll construction disturbance area numbers for this Project facility grouping are zero because the construction disturbance area for this grouping would be within the Delevan Pipeline/TRR Pipeline construction disturbance area. It is noted that the actual construction disturbance area for this grouping would be 383 acres within the pipeline construction disturbance area (348 acres plus 10 percent).

Colusa County that is currently zoned as Agriculture Preserve and Exclusive Agriculture. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, no parcels of land that have Williamson Act contracts would be affected during Project construction (due to these facilities being constructed within the construction disturbance area of the Delevan and TRR pipelines), which would result in a **less-than-significant impact**. Three parcels of land that have Williamson Act contracts would be affected during Project operation and maintenance. This permanent long-term impact would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard would impact 92 acres of land designated Agriculture Preserve and 256 acres of land designated Exclusive Agriculture in Colusa County. This would result in a zoning conflict, and would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Site visits to the area did not reveal forest land. Therefore, there would be no permanent loss of forest, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard would change the existing environment of lands designated pursuant to the FMMP as Prime Farmland and Farmland of Local Importance (acreages are presented in Table 20-5). This would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Glenn-Colusa Irrigation District Canal Facilities Modifications

Table 20-6 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of construction, operation, and maintenance activities associated with modifications to the Alternative A GCID Canal Facilities.

Table 20-6
Glenn-Colusa Irrigation District Canal Facilities Modifications^c – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Glenn County	O _c	3
Acreage of Potentially Affected Parcels		
Glenn County	O _c	1
Zoning Designation of Potentially Affected Parcels (Acres)		
Glenn County		
No Information Available		1
Intensive Agriculture		O _q
Total	5°	1
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Prime Farmland Farmland of Statewide Importance	O _q	O _q
Farmland of Local Importance	O _q	Od
Urban/Built-Up Land Other Land	1 3	0 ^d
Total	5°	1
Number of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	0	0
Total	0	0
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County		
Total	0	0
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program

WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

The proposed modifications would occur at the existing GCID Canal (which is zoned as Canal or is unzoned). Such modifications would not conflict with Glenn County's focus on agricultural production, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

clincludes the canal headgate, canal lining, and railroad siphon.

^dThere is less than one acre in these categories, but more than zero.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The modifications to the existing GCID Canal Facilities (headgate structure, canal lining, and railroad siphon) would not result in changes in the existing public facility/industrial land use of the Canal Facilities. The existing Canal Facilities are located in an undesignated area that is surrounded by the Intensive Agriculture land use designation by Glenn County, so proposed modifications to those facilities (which would occur only within the Canal) would be compatible with the General Plan-designated land use. Therefore, the proposed GCID Canal Facilities Modifications would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Land in the southeast corner of the railroad siphon footprint is designated Prime Farmland in Glenn County. Because this is a proposed replacement of an existing railroad siphon and would be within the Canal, no conversion of lands would occur, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

The modifications to the existing GCID Canal Facilities (headgate structure, canal lining, and railroad siphon) would not result in changes in the existing public facility/industrial land use of the Canal Facilities. The existing Canal Facilities are located in an unzoned area that is surrounded by land currently zoned as Exclusive Agriculture by Glenn County, so proposed modifications to those facilities (which would occur only within the Canal) would be compatible with the County zoning. Therefore, the proposed GCID Canal Facilities Modifications would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

No parcels of land that have Williamson Act contracts would be affected during Project construction, which would result in **no impact**. In addition, no parcels of land that have Williamson Act contracts would be affected during Project operation and maintenance; therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

Because the Canal is not zoned, the GCID Canal Facilities Modifications would result in no conflict with existing zoning. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

The GCID Canal is not considered forest land. Therefore, there would be no loss of forest land from the GCID Canal Facilities Modifications, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The railroad siphon footprint is FMMP-designated primarily Urban/Built-Up Land, with slivers of land designated Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance. The Canal lining and headgate structure footprint is FMMP-designated Other Land. Because these modifications are to existing facilities and would be within the Canal, no conversion of lands would occur, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, and Terminal Regulating Reservoir Electrical Switchyard

Table 20-7 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing and operating/maintaining the Alternative A TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard.

Table 20-7

Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant,
Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal
Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir to Funks Creek
Outlet, and Terminal Regulating Reservoir Electrical Switchyard – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	0°	9
Acreage of Potentially Affected Parcels		
Colusa County	0°	195
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Exclusive Agriculture	0°	194
N/A	O _c	1
Total	0 °	195
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Prime Farmland	O _c	194
Farmland of Local Importance	0°	1
Other Land	0°	Oq
Total	0°	195

Table 20-7

Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant,
Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal
Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir to Funks Creek
Outlet, and Terminal Regulating Reservoir Electrical Switchyard – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	Oc	0
Total	0 c	0
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	Oc	0
Total	0 c	0
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard, as that discussion pertains to Colusa County.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The construction, operation, and maintenance of the TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard would result in changes in the existing agricultural and open space land uses, as well as to the General Plan-designated land uses from Colusa County land use designations that promote agricultural land uses to public facility/industrial land uses. These expected changes in land use would be compatible with the existing surrounding land uses, resulting in a less-than-significant impact, when compared to Existing Conditions and the No Project/No Action Alternative. The expected changes would result in a significant impact, as related to the designated land uses, when compared to Existing Conditions and the No Project/No Action Alternative.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cAll construction disturbance area numbers for this Project facility grouping are zero because the construction disturbance area for this grouping would be within the Delevan Pipeline/TRR Pipeline and TRR construction disturbance areas. It is noted that the actual construction disturbance area for this grouping would be 214 acres (195 acres plus 10 percent).

^dThere is less than one acre in this category, but more than zero.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Approximately 194 acres of Prime Farmland in Colusa County would be affected by operation/maintenance of the TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Construction, operation, and maintenance of the TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard would conflict with the zoning of land in Colusa County that is currently zoned as Exclusive Agriculture. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

No parcels of land that have Williamson Act contracts would be affected during Project construction, which would result in **no impact**. In addition, no parcels of land that have Williamson Act contracts would be affected during Project operation and maintenance; therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard would impact 194 acres designated as Exclusive Agriculture in Colusa County, which is not considered to be forest land. This would, therefore, result in no conflict, and would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

The lands that TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard would be located on do not have forest land, so no conversion of forest land to non-forest use would occur, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, and TRR Electrical Switchyard would change the existing environment of lands designated pursuant to the FMMP as Prime Farmland and Farmland of Local Importance (acreages are presented in Table 20-7). This would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Delevan Pipeline and Terminal Regulating Reservoir Pipeline

Table 20-8 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Delevan Pipeline and the TRR Pipeline.

Table 20-8
Delevan Pipeline and Terminal Regulating Reservoir Pipeline – Alternative A
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^{b, c}
Number of Potentially Affected Parcels		
Colusa County	64	0
Acreage of Potentially Affected Parcels		
Colusa County	2,058	0
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Exclusive Agriculture Light or Heavy Industrial N/A	2,015 19 24	0 0 0
Total	2,058	0
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Prime Farmland Unique Farmland Farmland of Local Importance Other Land	957 1,001 46 54	0 0 0 0
Total	2,058	0
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	11	0
Total	11	0
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	425	0
Total	425	0
Number of Potentially Affected Parcels with WRP Easements	1	0
Number of Potentially Affected Acres with WRP Easements	5 ^d	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

[°]All permanent impact numbers for this Project facility grouping are zero because these are underground facilities.

^dThe actual WRP easement that would be affected during Project construction is 4.6 acres.

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Delevan Pipeline and TRR Pipeline, as that discussion pertains to the Farmland Protection Policy Act and Colusa County's General Plan. The Delevan Pipeline and TRR Pipeline would not be located within Glenn County, so that County's General Plan is not applicable to this Project facility.

The Delevan Pipeline would cross one parcel that has a WRP easement. During the Project construction period, 4.6 acres of WRP easement land would be affected, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative. Operation and maintenance of the Delevan Pipeline would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative because the periodically spaced blowoff valves and similar valves along the pipeline would be installed to avoid on-site wetlands.

Construction, operation, and maintenance of the TRR Pipeline would not affect any parcels that have a WRP easement, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The Delevan Pipeline and TRR Pipeline would result in changes in the existing agricultural and open space land uses during only the Project construction period, resulting in a **significant impact** during that time, when compared to Existing Conditions and the No Project/No Action Alternative. Other than providing access to periodically spaced blowoff valves and similar valves along the pipelines, the pipelines would be underground facilities that would not result in permanent impacts to the existing land uses (i.e., the pipelines would be compatible with existing land uses) during the Project operation and maintenance period, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, construction of the pipelines would be incompatible with the Colusa County General Plan-designated land uses, resulting in a **significant impact** during the Project construction period, when compared to Existing Conditions and the No Project/No Action Alternative. Operation and maintenance of the pipelines would be compatible with the General Plan-designated land uses, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Prime Farmland exists along the proposed pipeline alignments. However, no Prime Farmland would be permanently affected by operation or maintenance of the pipelines because they would be installed underground, thus allowing existing land uses to continue after Project construction is complete. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

There would be no permanent conflicts with existing agricultural zoning or Williamson Act contracts from pipeline operation and maintenance because they would be installed underground. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

There would be no permanent conflicts with existing forest land zoning from pipeline operation and maintenance because they would be installed underground. In addition, the land that the pipelines would cross is not zoned for forest land. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

There would be no permanent loss of forest land from the pipelines' operation and maintenance because they would be installed underground. In addition, the land that the pipelines would cross is not zoned for forest land, indicating that forest land does not exist along the pipelines' alignment. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Delevan Pipeline and TRR Pipeline would only temporarily change the existing environment of lands designated pursuant to the FMMP as Prime Farmland, Unique Farmland, and Farmland of Local Importance (acreages are presented in Table 20-8) during Project construction. Because the pipelines would be installed underground, no permanent conversion of farmland or forest land is expected, except where periodically spaced blowoff valves and similar valves would be installed, resulting in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Delevan Transmission Line

The Alternative A Delevan Transmission Line would parallel, and be completely within the construction disturbance area of, the proposed Delevan Pipeline, with the exception of the westernmost 3.5 miles. Because the impacts of the eastern approximately nine miles of the proposed transmission line route construction disturbance area are already accounted for in the impact assessment for the Delevan Pipeline, only the remaining 3.5 miles of the transmission line are evaluated here. Table 20-9 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Delevan Transmission Line.

Table 20-9 Delevan Transmission Line – Alternative A Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	12	39 ^c
Acreage of Potentially Affected Parcels		
Colusa County	71	3 ^c
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Agriculture Preserve Exclusive Agriculture	31 40	
Total	71	3 ^c
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Prime Farmland Farmland of Local Importance	2 70	
Total	71	3°
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	7	11°
Total	7	11°
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	54	3 ^c
Total	54	3°
Number of Potentially Affected Parcels with WRP Easements	1	0
Number of Potentially Affected Acres with WRP Easements	2 ^d	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Delevan Transmission Line, as that discussion pertains to the Farmland Protection Policy Act and Colusa County's General Plan. The transmission line would not be located within Glenn County, so that County's General Plan is not applicable to this Project facility.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^eBecause the placement of the transmission line towers is currently not known, each parcel along the alignment would be potentially affected, resulting in 2.5 acres actual permanent disturbance.

^dThe actual WRP easement that would be affected during Project construction is 2.3 acres.

The Delevan Transmission Line would cross one parcel that has a WRP easement. During the Project construction period, 2.3 acres of WRP easement land would be affected, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative. Operation and maintenance of the Delevan Transmission Line would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative because the transmission line towers would be installed so they span the parcel, and access to the towers for maintenance would be infrequent and would be routed to avoid on-site wetlands.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The Delevan Transmission Line would result in changes in the existing agricultural and open space land uses during only the Project construction period, resulting in a **significant impact** during that time, when compared to Existing Conditions and the No Project/No Action Alternative. Other than providing access to periodically spaced transmission line towers along the alignment, the transmission line would not result in permanent impacts to the existing land uses (i.e., it would be compatible with existing land uses) during the Project operation and maintenance period, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, construction of the transmission line would be incompatible with the Colusa County General Plan-designated land uses, resulting in a **significant impact** during the Project construction period, when compared to Existing Conditions and the No Project/No Action Alternative. Operation and maintenance of the transmission line would be compatible with the General Plan-designated land uses, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Prime Farmland exists along the proposed transmission line alignment. However, due to the few acres of Prime Farmland (i.e., less than two acres) that would be affected by Project construction, and the fact that the transmission line tower footings would impact a total of 2.5 acres of land along the entire transmission line alignment, it may be possible to construct the transmission line tower footings on land that is not designated as Prime Farmland. After Project construction is complete, existing land uses could continue. This would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Minimal permanent conflicts are expected with existing agricultural zoning (resulting in a less-than-significant impact relative to zoning) or Williamson Act contracts from transmission line operation and maintenance because the transmission line tower footings would permanently impact a total of 2.5 acres of land along the entire transmission line alignment, and could permanently affect 11 parcels of land that have Williamson Act contracts. Due to the potential conflicts, this is considered a significant impact relative to Williamson Act contracts, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The Delevan Transmission Line would impact 31 acres of land designated Agriculture Preserve in Colusa County. This would result in a zoning conflict, and would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-6** discussion. The land is, therefore, zoned for forest land. However, site visits to the area did not reveal forest land. Therefore, there would be no permanent loss of forest, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Delevan Transmission Line would temporarily change the existing environment of lands designated pursuant to the FMMP as Prime Farmland, Unique Farmland, and Farmland of Local Importance (acreages are presented in Table 20-9). This would occur during the Project construction period, and would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Delevan Pipeline Intake Facilities

Table 20-10 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Delevan Pipeline Intake Facilities.

Table 20-10

Delevan Pipeline Intake Facilities – Alternative A

Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	0c	2
Acreage of Potentially Affected Parcels		
Colusa County	0c	19
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Exclusive Agriculture	0c	15
Floodway	O _c	4
Total	0 c	19
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Prime Farmland	0c	13
Other Land	0c	6
Total	0 °	19

Table 20-10 Delevan Pipeline Intake Facilities – Alternative A Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	0	0
Total	0	0
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	0	0
Total	0	0
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Delevan Pipeline Intake Facilities, as that discussion pertains to Colusa County.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The Delevan Pipeline Intake Facilities would result in changes in the existing agricultural and floodway land uses during Project construction, operation, and maintenance periods, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative. In addition, the current design, construction activities, and location of the proposed Delevan Pipeline Intake Facilities would potentially conflict with the operation of the existing Maxwell Irrigation District facilities located adjacent on the upstream side of the proposed facilities. This would result in a **potentially significant impact** on that land use, when compared to Existing Conditions and the No Project/No Action Alternative.

The Delevan Pipeline Intake Facilities would be incompatible with the Colusa County General Plan-designated land uses, resulting in a **significant impact** during the Project construction, operation, and maintenance periods, when compared to Existing Conditions and the No Project/No Action Alternative.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cAll construction disturbance area numbers for this Project facility grouping are zero because the construction disturbance area for this grouping would be within the adjacent Delevan Pipeline construction disturbance area. It is noted that the actual construction disturbance area for this grouping would be 17.1 acres within the pipeline construction disturbance area (it would be smaller than the permanent facility footprint because of an overlap between the Delevan Pipeline construction disturbance area and Delevan Pipeline Intake Facilities permanent facility footprint).

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Approximately 13 acres of Prime Farmland in Colusa County would be affected by operation and maintenance of the Delevan Pipeline Intake Facilities, resulting in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Construction, operation, and maintenance of the Delevan Pipeline Intake Facilities would conflict with the zoning of land in Colusa County that is currently zoned as Exclusive Agriculture. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

No parcels of land that have Williamson Act contracts would be affected during Project construction, which would result in **no impact**. In addition, no parcels of land that have Williamson Act contracts would be affected during Project operation and maintenance; therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The Delevan Pipeline Intake Facilities would impact 15 acres designated Exclusive Agriculture in Colusa County (which is not considered to be forest land). This would, therefore, result in no conflict, and would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

The lands that the Delevan Pipeline Intake Facilities would be located on do not have forest land, so no conversion of forest land to non-forest use would occur, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Delevan Pipeline Intake Facilities would permanently change the existing environment of approximately 13 acres of land designated pursuant to the FMMP as Prime Farmland. This would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Electrical Distribution Lines

Table 20-11 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative A Electrical Distribution Lines.

Table 20-11 Electrical Distribution Lines – Alternative A Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	16	16 ^d
Acreage of Potentially Affected Parcels		
Colusa County	27	0c
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Agriculture Preserve	27	
Total	27	0 ^c
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Farmland of Local Importance	26	
Other Land	0°	
Total	27	0 c
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Colusa County	16	16 ^d
Total	16	16 ^d
Acreage of Potentially Affected Parcels with Williamson Act		
Contracts		
Colusa County	27	0c
Total	27	0 c
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Electrical Distribution Lines, as that discussion pertains to Colusa County.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The Electrical Distribution Lines would result in changes in the existing agricultural and open space land uses during only the Project construction period, resulting in a **significant impact** during that time, when compared to Existing Conditions and the No Project/No Action Alternative. Other than providing access

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is less than one acre in this category, but more than zero.

^dBecause the placement of the electrical distribution lines is currently not known, each parcel along the alignment would be potentially affected.

to the distribution line poles along the alignments, the distribution lines would not result in permanent impacts to the existing land uses (i.e., it would be compatible with existing land uses) during the Project operation and maintenance period, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, construction of the distribution lines would be incompatible with the Colusa County General Plan-designated land uses, resulting in a **significant impact** during the Project construction period, when compared to Existing Conditions and the No Project/No Action Alternative. Operation and maintenance of the distribution lines would be compatible with the General Plan-designated land uses, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

Prime Farmland does not exist along the proposed distribution line alignments. This would result in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

Minimal permanent conflicts are expected with existing agricultural zoning (resulting in a less-than-significant impact relative to zoning) or Williamson Act contracts from distribution line operation and maintenance because the distribution line poles would require a very small amount of land along the entire distribution line alignments, permanently affecting up to 16 parcels of land that have Williamson Act contracts. Due to the potential conflicts, this is considered a significant impact relative to Williamson Act contracts, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The Electrical Distribution Lines would have no permanent impact on land designated Agriculture Preserve in Colusa County, except at the individual pole locations, which would comprise a very small amount of land. This would result in minimal zoning conflict, and would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

The alignments of the Electrical Distribution Lines do not have forest land, so no conversion of forest land to non-forest use would occur, resulting in **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Electrical Distribution Lines would not permanently change the existing environment of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local

Potential Farmland to another land use, except at the individual pole locations, which would comprise a very small amount of land. This would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Project Buffer

Table 20-12 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing and maintaining the Alternative A Project Buffer.

Table 20-12
Project Buffer – Alternative A
Land Use Summary

Descriptor	Temporary Impacts	Permanent Impacts*
Number of Potentially Affected Parcels		
Glenn County	0	10
Colusa County	0	102
Total	0	112
Acreage of Potentially Affected Parcels		
Glenn County	0	1,872
Colusa County	0	9,977
Total	0	11,849
Zoning Designation of Potentially Affected Parcels (Acres)	-	, -
Glenn County		
Agricultural Preserve (144-acre minimum)		1,607
Foothill Agricultural/Forestry (144-acre minimum)		256
Colusa County		
Agriculture Preserve		9,391
Exclusive Agriculture		532
Foothill Agricultural/Forestry (144-acre minimum)		5
Floodway		10
N/A		48
Total	0	11,849
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Local Potential Farmland		277
Grazing Land		1,584
Other Land		1
Colusa County		
Prime Farmland		284
Unique Farmland		7
Farmland of Local Importance		9,593
Water		3
Other Land		100
Total	0	11,849
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	0	8
Colusa County	0	73
Total	0	81
Acreage of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	0	1,611
Colusa County	0	8,710
Total	0	10,321

Table 20-12 Project Buffer – Alternative A Land Use Summary

Descriptor	Temporary Impacts	Permanent Impacts*
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^{*}All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

Refer to the **Impact Land-2** discussion for the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge. That discussion is also applicable to the Project Buffer because the Project Buffer would be located in both Glenn and Colusa counties.

Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to the Proposed Project Facilities

The Project Buffer would serve to buffer the Project facilities and activities from adjacent and surrounding land uses. The boundary of the Project Buffer would be fenced, using fencing materials that are similar to what is currently used in Glenn and Colusa counties for ranches. The lands within the Project Buffer would be managed as open space, which would be compatible with the existing and General Plan land uses that are adjacent to the Project facilities. Therefore, there would be **no impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Resources Agency, to Non-Agricultural Use

The Project Buffer would include 284 acres of Prime Farmland and 7 acres of Unique Farmland. It would be managed as open space. The land is zoned for agricultural purposes, but may be used for grazing or open space, in addition to being actively cropped. The change from an actively cropped agricultural land use to grazing or open space would result in a **less-than-significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract

The Project Buffer would conflict with the zoning of land in Glenn County that is currently zoned as Agricultural Preserve and Foothill Agriculture/Forestry; and Agriculture Preserve, Exclusive Agriculture, Foothill Agriculture/Forestry, and Floodway in Colusa County. The permanent conflict from Project operation and maintenance would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

In addition, 81 parcels of land that have Williamson Act contracts would be permanently affected by the Project Buffer, which would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))

The Project Buffer encompasses lands in both Glenn and Colusa counties that are zoned for forest land and/or timberland; specifically, lands zoned as Foothill Agricultural/Forestry and Agricultural Preserve in Glenn County, and Foothill Agricultural/Forestry and Agriculture Preserve in Colusa County. This would result in a zoning conflict, and would be a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use

Refer to the **Impact Land-6** discussion. Due to the land being zoned for forest land and/or timberland, this is considered a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

Impact Land-8: Other Changes in the Existing Environment Which, due to Their Location or Nature, Could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use

The Project Buffer Line would permanently change the existing environment of lands designated pursuant to the FMMP as Prime Farmland, Unique Farmland, Farmland of Local Importance, and Local Potential Farmland (acreages are presented in Table 20-12). The Project Buffer would also change the existing environment of lands zoned as Foothill Agriculture/Forestry. These changes would result in a **significant impact**, when compared to Existing Conditions and the No Project/No Action Alternative.

20.3.6.4 Summary of Alternative A Land Use Impacts

Table 20-13 provides a summary of the number of potentially affected parcels, the acreage of those parcels, the zoning designations, the number of parcels and acreage of parcels with Williamson Act contracts, and the number of parcels and acreage of parcels with WRP easements for Alternative A.

Table 20-13
Summary of Land Use Impacts – Alternative A

		tially Affected cels		Potentially Parcels		Designation of I		Affected F William	otentially Parcels with Ison Act tracts	Affected A	otentially Acres with Act Contracts	Affected P	otentially arcels with sements	Affected Acı	otentially res with WRP ments
Project Facility	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Desig.	Temp.a	Perm.b	Temp.a	Perm.b	Temp.a	Perm.b	Temp.ª	Perm.b	Temp. ^a	Perm.b
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge	149	137	13,464	12,464	AP1 AP2 EA FA-F N/A DU	13,464 ^d	1,592 10,535 33 189 115 0	86	74	11,892	10,892	0	0	0	0
Recreation Areas	15	15	1,170	1,170	AP1 AP2	293 877	293 877	14	14	1,121	1,121	0	0	0	0
Road Relocations and TRR Pipeline Road	57	52	885	287	AP1 AP2 N/A	199 668 18	70 206 11	52	48	843	267	0	0	0	0
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant	Oe	7	O _e	89	AP2	O _e	89	Oe	6	O _e	79	0	0	0	0
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	Oe	14	O ^e	348	AP2 EA	O _e	92 256	Oe	3	Oe	5	0	0	0	0
GCID Canal Facilities Modifications	0	3	5	1	NL IA DU	5 ^d	1 0 0	0	0	0	0	0	0	0	0
TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, and TRR Electrical Switchyard	O _e	9	O _e	195	EA N/A	O _e	194 1	O _e	0	O _e	0	0	0	0	0
Delevan Pipeline and TRR Pipeline	64	0	2,058	0	EA LHI N/A	2,015 19 24	0 0 0	11	0	425	0	1°	0	5	0
Delevan Transmission Line	12	39	71	3	AP2 EA DU	31 40 0	3	7	11	54	3	1°	0	2	0
Delevan Pipeline Intake Facilities	Oe	2	O _e	19	EA F	O _e	15 4	0	0	0	0	0	0	0	0
Electrical Distribution Lines	16	16	27	0	AP2	27	0	16	16	27	0	0	0	0	0
Project Buffer	0	112	0	11,849	AP1 AP2 EA F FA-F N/A	0	1,607 9,391 532 10 261 48	0	81	0	10,321	0	0	0	0
TOTAL	274 ^f	209 ^f	17,680	26,425		17,680	26,425	133 ^f	113 ^f	14,362	22,688	1 ^c	0	7	0

Table 20-13 Summary of Land Use Impacts – Alternative A

	No. of Potenti	•	-	Potentially I Parcels	•	esignation of F fected Acreag	•	Affected P William	otentially arcels with son Act tracts	Affected A	otentially Acres with Act Contracts	No. of Po Affected P WRP Ea		No. of Po Affected Acre Easer	es with WRP
Project Facility	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Desig.	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Temp. ^a	Perm.b

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

Desig. = Designation

Perm. = Permanent

Temp. = Temporary

WRP = Wetland Reserve Program

Zoning Designations:

AP1 = Agricultural Preserve (Glenn County)

AP2 = Agriculture Preserve (Colusa County)

DU = Designation Undetermined

EA = Exclusive Agriculture

F = Floodway

FA-F = Foothill Agricultural/Forestry

IA = Intensive Agriculture

LHI = Light or Heavy Industrial

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

NL = No Information Available

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is one parcel total with a WRP easement that would be affected.

^dThe subtotals by designations of acreages of temporary impacts cannot be determined because it is unknown which parcels would comprise the complete construction disturbance area.

eThe numbers for parcels and acreages of temporary impacts for this Project facility grouping are zero because they are within and already accounted for under the numbers for parcels and acreages of temporary impacts for another Project facility grouping.

The parcel totals are the count of distinct parcels across all Project facility groupings considered in the analysis (i.e. the total count does not represent the sum of column, as one parcel could be affected by several facilities). Therefore, these totals assume the worst case impact.

Table 20-14 provides a summary of impacts to FMMP-designated land for Alternative A.

Table 20-14
Summary of Impacts to FMMP-Designated Land – Alternative A

	Acreage																			
	Temporary Impact to FMMP-Designated Land ^a									Permanent Impact to FMMP-Designated Land ^b										
Project Facility	D	G	L	LP	Р	S	U	Х	DU	D	G	L	LP	P	S	U	W	х	DU	
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge ^c	0	С	С	С	0	0	0	С	13,464°	0	727	10,582	1,042	0	0	0	0	113	0	
Recreation Areas	0	232	811	61	0	0	0	66	0	0	232	811	61	0	0	0	0	66	0	
Road Relocations and TRR Pipeline Road	0	128	669	87	0	0	0	O _d	0	0	51	206	30	0	0	0	0	O _d	0	
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant	0	O _e	O _e	O _e	O _e	0	Oe	Oe	0	0	0	89	0	0	0	0	0	0	0	
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	O ^e	O ^e	O _e	0e	O _e	0	Oe	O _e	0	0	0	233	0	115	0	0	0	0	0	
GCID Canal Facilities Modifications	1	0	O _d	0	O _d	O _d	0	3	0	O _d	0	O ^d	0	O _d	O _d	0	0	1	0	
TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, and TRR Electrical Switchyard	0	0	O _e	0	O _e	0	0	O _e	0	0	0	1	0	194	0	0	0	Oq	0	
Delevan Pipeline and TRR Pipeline	0	0	46	0	957	0	1,001	54	0	0	0	0	0	0	0	0	0	0	0	
Delevan Transmission Line ^f	0	0	70	0	2	0	0	0	0	0	0	f	0	f	0	0	0	0	3 ^f	
Delevan Pipeline Intake Facilities	0	0	0	0	0e	0	0	0e	0	0	0	0	0	13	0	0	0	6	0	
Electrical Distribution Lines	0	0	26	0	0	0	0	O _d	0	0	0	0	0	0	0	0	0	0	0	
Project Buffer	0	0	0	0	0	0	0	0	0	0	1,584	9,593	277	284	0	7	3	101	0	
TOTAL	1	360°	1,622 ^c	148°	960	0 ^d	1,001	124°	13,464 ^c	0	2,594	21,515 ^f	1,410	606 ^f	0 ^d	7	3	287	3 ^f	

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed in this table or Table 20-

^fA total of 2.5 acres would be permanently disturbed from transmission line poles, but due to pole locations being currently unknown, the affected FMMP category cannot currently be determined. Therefore, 2.5 acres of land more than the total listed in Long-Term Impacts would be permanently affected.

Notes:

FMMP = Farmland Mapping and Monitoring Program

FMMP Designations:

D = Urban and Built-up Land

DU = Designation Undetermined

G = Grazing Land

L = Farmland of Local Importance

LP = Local Potential Farmland

P = Prime Farmland

S = Farmland of Statewide Importance

U = Unique Farmland

W = Water

X = Other Land

bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed in this table or Table 20-13.

^cFor the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge Project facilities grouping, a total of 13,464 acres would be temporarily affected during Project construction. The acreage cannot be assigned to a specific FMMP category because the 1,000 acres of construction disturbance area that would be located outside of the Sites Reservoir footprint have not been defined.

^dThere is less than one acre in these categories, but more than zero.

eThe numbers for parcels and acreages of temporary impacts for this Project facility grouping are zero because they are within and already accounted for under the numbers for parcels and acreages of temporary impacts for another Project facility grouping.

20.3.7 Impacts Associated with Alternative B

20.3.7.1 Extended Study Area – Alternative B

Construction, Operation, and Maintenance Impacts

The impacts associated with Alternative B, as they relate to established communities (Impact Land-1); potential conflicts with land use plans, policies or regulations (Impact Land-2); compatibility with existing land uses adjacent to proposed Project facilities (Impact Land-3); effects on FMMP designated land uses (Impact Land-4); consistency with existing zoning, or effects on parcels that have Williamson Act contracts (Impact Land-5); consistency with forest land zoning (Impact Land-6) or effects on forest land (Impact Land-7); and other changes in the environment that could convert farmland or forest land to other uses (Impact Land-8); would be the same as described for Alternative A for the Extended Study Area.

20.3.7.2 Secondary Study Area - Alternative B

Construction, Operation, and Maintenance Impacts

The impacts associated with Alternative B, as they relate to established communities (Impact Land-1); potential conflicts with land use plans, policies or regulations (Impact Land-2); compatibility with existing land uses adjacent to proposed Project facilities (Impact Land-3); effects on FMMP designated land uses (Impact Land-4); consistency with existing zoning, or effects on parcels that have Williamson Act contracts (Impact Land-5); consistency with forest land zoning (Impact Land-6) or effects on forest land (Impact Land-7); and other changes in the environment that could convert farmland or forest land to other uses (Impact Land-8); would be the same as described for Alternative A for the Secondary Study Area.

20.3.7.3 Primary Study Area - Alternative B

Construction, Operation, and Maintenance Impacts

The following Primary Study Area Project facilities are included in both Alternatives A and B. These facilities would require the same construction methods and operation and maintenance activities regardless of alternative, and would, therefore, result in the same construction, operation, and maintenance impacts to land use:

- Recreation Areas
- Sites Pumping/Generating Plant
- Sites Electrical Switchyard
- Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure
- Sites Reservoir Inlet/Outlet Structure
- Field Office Maintenance Yard
- Holthouse Reservoir Complex
- Holthouse Reservoir Electrical Switchyard
- GCID Canal Facilities Modifications
- GCID Canal Connection to the TRR
- TRR
- TRR Pumping/Generating Plant
- TRR Electrical Switchyard
- TRR Pipeline
- TRR Pipeline Road

- Delevan Pipeline
- Delevan Pipeline Electrical Switchyard

If Alternative B is implemented, the footprint or construction disturbance area of Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge; the Road Relocations and TRR Pipeline Road; the Delevan Transmission Line; and the Electrical Distribution Lines would differ from Alternative A. In addition, the Delevan Pipeline Intake Facilities would be replaced by the Delevan Pipeline Discharge Facility. The boundary of the Project Buffer would be the same for Alternatives A and B, but because the footprints of some of the Project facilities would differ between the alternatives, the acreage of land within the Project Buffer would also differ. The acreage summaries of the potential temporary and permanent land use changes associated with Alternative B are presented in Tables 20-15 through 20-20.

These differences in the size of the facility footprint, alignment, or construction disturbance area would not change the type of construction, operation, and maintenance activities that were described for Alternative A. They would, therefore, have the same impact on established communities (Impact Land-1); its potential conflicts with land use plans, policies or regulations (Impact Land-2); its compatibility with existing land uses adjacent to proposed Project facilities (Impact Land-3); its effects on FMMP designated land uses (Impact Land-4); its consistency with existing zoning, or effects on parcels that have Williamson Act contracts (Impact Land-5); its consistency with forest land zoning (Impact Land-6) or effects on forest land (Impact Land-7); and other changes in the environment that could convert farmland or forest land to other uses (Impact Land-8) as described for Alternative A.

Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge

Table 20-15 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing and maintaining the Alternative B Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge.

Table 20-15
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge – Alternative B
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Glenn County	11	11
Colusa County	136	136
Undetermined ^c	12	0
Total	159	147
Acreage of Potentially Affected Parcels		
Glenn County	2,188	2,188
Colusa County	12,226	12,226
Undetermined ^c	1,000	0
Total	15,414	14,414

Table 20-15
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge – Alternative B
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Zoning Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Agricultural Preserve (144-acre minimum) Foothill Agriculture/Forestry (144-acre minimum) Colusa County		1,907 258
Agriculture Preserve Exclusive Agriculture Foothill Agriculture/Forestry (144-acre minimum) N/A		12,079 33 9 128
Total	15,414 ^d	14,414
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Local Potential Farmland Grazing Land Other Land		1,145 1,015 6
Colusa County		
Farmland of Local Importance Other Land		12,120 128
Total	15,414 ^d	14,414
Number of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	9	9
Colusa County	74	74
Undetermined ^c	12	0
Total	95	83
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County		1,921
Colusa County		10,729
Total	13,650 ^d	12,650
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cUndetermined values represent construction disturbance areas for which locations have not been determined. Reported undetermined values are the maximum number of additional parcels or acreages that would be temporarily affected.

^dThe temporarily affected acreages by zoning and FMMP designations and Williamson Act contracts cannot be determined because it is unknown which parcels would comprise the 1,000-acre construction disturbance area.

Road Relocations and Terminal Regulating Reservoir Pipeline Road

Table 20-16 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative B Road Relocations and TRR Pipeline Road.

Table 20-16
Road Relocations and Terminal Regulating Reservoir Pipeline Road – Alternative B
Land Use Summary

Descriptor Descriptor	Temporary Impacts ^{a,c}	Permanent Impacts ^b
Number of Potentially Affected Parcels		-
Glenn County	11	13
Colusa County	42 ^d	38
Total	53	51
Acreage of Potentially Affected Parcels		
Glenn County	222	82
Colusa County	671	207
Total	893	289
Zoning Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Agricultural Preserve (144-acre minimum)	136	55
Agricultural Preserve (72-acre minimum) N/A	68 17	15 11
Colusa County	17	
Agriculture Preserve	670	208
N/A	2	0°
Total	893	289
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Local Potential Farmland	83	29
Grazing Land Other Land	137 0°	53 0°
	0°	0°
Colusa County	670	200
Farmland of Local Importance Other Land	672 0°	208 0
Total	893	294
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	10	12
Colusa County	38	35
Total	48	47
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	201	70
Colusa County	650	200
Total	851	270
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

Table 20-16 Road Relocations and Terminal Regulating Reservoir Pipeline Road – Alternative B Land Use Summary

Descriptor Temporary Impacts^{a,c} Permanent Impacts^b

^dDifferences between temporary and long-term acreages for these categories are due to the TRR Pipeline Road being located within the Delevan and TRR Pipeline disturbance area, thus having no construction disturbance area of its own. This also applies to the differences in the number of parcels affected.

Notes

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Delevan Transmission Line

Table 20-17 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative B Delevan Transmission Line.

Table 20-17
Delevan Transmission Line – Alternative B
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	8	8°
Acreage of Potentially Affected Parcels		
Colusa County	54	1°
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Agriculture Preserve	31	
Exclusive Agriculture	23	
Total	54	1 ^{c,d}
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Farmland of Local Importance	54	
Total	54	1 ^{c,d}
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	6	6 °
Total	6	6 °
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	49	1°
Total	49	1 ^c
Number of Potentially Affected Parcels with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is less than one acre in these categories, but more than zero.

Table 20-17 Delevan Transmission Line – Alternative B Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Delevan Pipeline Discharge Facility

Table 20-18 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative B Delevan Pipeline Discharge Facility.

Table 20-18
Delevan Pipeline Discharge Facility – Alternative B
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	O _c	3
Acreage of Potentially Affected Parcels		
Colusa County	0c	8
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Exclusive Agriculture	0c	5
Floodway	0°	3
Total	0 c	8
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Prime Farmland	O _c	4
Other Land	0c	3
Total	0 c	8
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	0	0
Total	0	0
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	0	0
Total	0	0

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^eBecause the placement of the transmission line towers is currently not known, each parcel along the alignment would be potentially affected, resulting in 0.5 acres actual permanent disturbance.

^dThere is less than one acre in these categories, but more than zero.

Table 20-18 Delevan Pipeline Discharge Facility – Alternative B Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Electrical Distribution Lines

Table 20-19 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of constructing, operating, and maintaining the Alternative B Electrical Distribution Lines.

Table 20-19
Electrical Distribution Lines – Alternative B
Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels		
Colusa County	14	14 ^d
Acreage of Potentially Affected Parcels		
Colusa County	25	Oc
Zoning Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Agriculture Preserve	25	
Total	25	0 c
FMMP Designation of Potentially Affected Parcels (Acres)		
Colusa County		
Farmland of Local Importance	25	
Other Land	0°	
Total	25	0 ^c
Number of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	14	14 ^d
Total	14	14 ^d
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Colusa County	25	O _c
Total	25	0 c

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cAll construction disturbance area numbers for this Project facility grouping are zero because the construction disturbance area for this grouping would be within the adjacent Delevan Pipeline construction disturbance area. It is noted that the actual construction disturbance area for this grouping would be 6.3 acres within the pipeline construction disturbance area (it would be smaller than the permanent facility footprint because of an overlap between the Delevan Pipeline construction disturbance area and Delevan Pipeline Intake Facilities permanent facility footprint).

Table 20-19 Electrical Distribution Lines – Alternative B Land Use Summary

Descriptor	Temporary Impacts ^a	Permanent Impacts ^b
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

FMMP = Farmland Mapping and Monitoring Program WRP = Wetland Reserve Program

Project Buffer

Table 20-20 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of the Alternative B Project Buffer.

Table 20-20 Project Buffer – Alternative B Land Use Summary

Descriptor	Temporary Impacts	Permanent Impacts*
Number of Potentially Affected Parcels		
Glenn County	0	10
Colusa County	0	98
Total	0	108
Acreage of Potentially Affected Parcels		
Glenn County	0	1,479
Colusa County	0	8,430
Total	0	9,909
Zoning Designation of Potentially Affected Parcels (Acres) Glenn County Agricultural Preserve (144-acre minimum) Foothill Agricultural/Forestry (144-acre minimum) Colusa County Agriculture Preserve Exclusive Agriculture Foothill Agricultural/Forestry (144-acre minimum) Floodway N/A		1,292 180 7,846 542 3 12 34
Total	0	9,909
FMMP Designation of Potentially Affected Parcels (Acres) Glenn County Local Potential Farmland Grazing Land Other Land		179 1,292 1

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is less than one acre in this category, but more than zero.

^dBecause the placement of the electrical distribution lines is currently not known, each parcel along the alignment would be potentially affected.

Table 20-20 Project Buffer – Alternative B Land Use Summary

Descriptor	Temporary Impacts	Permanent Impacts*
Colusa County		
Prime Farmland		293
Unique Farmland		7
Farmland of Local Importance		8,052
Water		3
Other Land		82
Total	0	9,909
Number of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	0	8
Colusa County	0	69
Total	0	77
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	0	1,296
Colusa County	0	7,265
Total	0	8,561
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^{*}All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

20.3.7.4 Summary of Alternative B Land Use Impacts

Table 20-21 provides a summary of the number of potentially affected parcels, the acreage of those parcels, the zoning designations, the number of parcels and acreage of parcels with Williamson Act contracts, and the number of parcels and acreage of parcels with WRP easements for Alternative B.

Table 20-21
Summary of Land Use Impacts – Alternative B

	No. of Potentially Affected Parcels			Acreage of Potentially Affected Parcels		esignation of I		No. of Potentially Affected Parcels with Williamson Act Contracts		No. of Potentially Affected Acres with Williamson Act Contracts		No. of Potentially Affected Parcels with WRP Easements		No. of Potentially Affected Acres with WRP Easements	
Project Facility	Temp.a	Perm.b	Temp. ^a	Perm.b	Desig.	Temp.a	Perm.b	Temp.a	Perm.b	Temp. ^a	Perm.b	Temp.a	Perm.b	Temp.a	Perm.b
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge	159	147	15,414	14,414	AP1 AP2 EA FA-F N/A DU	15,414 ^d	1,907 12,079 33 267 128 0	95	83	13,650	12,650	0	0	0	0
Recreation Areas	15	15	1,170	1,170	AP1 AP2	293 877	293 877	14	14	1,121	1,121	0	0	0	0
Road Relocations and TRR Pipeline Road	53	51	893	289	AP1 AP2 N/A	204 670 19	70 208 11	48	47	851	270	0	0	0	0
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant	Oe	7	0 _e	89	AP2	O _e	89	O _e	6	0e	79	0	0	0	0
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	O ^e	14	O _e	348	AP2 EA	0e 0e	92 256	O _e	3	O _e	5	0	0	0	0
GCID Canal Facilities Modifications	0	3	5	1	NL IA DU	5 ^d	1 0 0	0	0	0	0	0	0	0	0
TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, and TRR Electrical Switchyard	O _e	9	O _e	195	EA N/A	O _e	194 1	0e	0	O _e	0	0	0	0	0
Delevan Pipeline and TRR Pipeline	64	0	2,075 ^g	0	EA LHI N/A	2,032 ^g 19 24	0 0 0	11	0	430 ^g	0	1°	0	5	0
Delevan Transmission Line	8	8	54	1	AP2 EA DU	31 23 0	1	6	6	49	1	0	0	0	0
Delevan Pipeline Discharge Facility	O _e	3	0 ^e	8	EA F	O _e	5 3	0	0	0	0	0	0	0	0
Electrical Distribution Lines	14	14	25	0	AP2	25	0	14	14	25	0	0	0	0	0
Project Buffer	0	108	0	9,909	AP1 AP2 EA F FA-F N/A		1,292 7,846 542 12 183 34	0	77	0	8,561	0	0	0	0
TOTAL	277 ^f	210 ^f	19,637	26,424		19,637	26,424	135 ^f	113 ^f	16,126	22,687	1	0	5	0

Table 20-21 Summary of Land Use Impacts – Alternative B

	No. of Potent Pare	ially Affected					No. of Potentially Affected Acres with Williamson Act Contracts		No. of Potentially Affected Parcels with WRP Easements		No. of Potentially Affected Acres with WRP Easements				
Project Facility	Temp. ^a	Perm.b	Temp. ^a	Perm. ^b	Desig.	Temp.a	Perm.b	Temp. ^a	Perm. ^b	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Temp.a	Perm. ^b

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

The Delevan Pipeline and TRR Pipeline facility grouping is the same for all three alternatives. The acreages of temporary impacts are slightly different due differences in the boundaries associated with other Project facility groupings and the method applied to reduce the double counting of acreages.

Notes:

Desig. = Designation

Perm. = Permanent

Temp. = Temporary

WRP = Wetland Reserve Program

Zoning Designations:

AP1 = Agricultural Preserve (Glenn County)

AP2 = Agriculture Preserve (Colusa County)

DU = Designation Undetermined

EA = Exclusive Agriculture

F = Floodway

FA-F = Foothill Agricultural/Forestry

IA = Intensive Agriculture

LHI = Light or Heavy Industrial

NL = No Information Available

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is one parcel total with a WRP easement that would be affected.

dThe subtotals by designations of acreages of temporary impacts cannot be determined because it is unknown which parcels would comprise the complete construction disturbance area.

The numbers for parcels and acreages of temporary impacts for this Project facility grouping are zero because they are within and already accounted for under the numbers for parcels and acreages of temporary impacts for another Project facility grouping.

The parcel totals are the count of distinct parcels across all Project facility groupings considered in the analysis (i.e. the total count does not represent the sum of column, as one parcel could be affected by several facilities). Therefore, these totals assume the worst case impact.

Table 20-22 provides a summary of impacts to FMMP-designated land for Alternative B.

Table 20-22
Summary of Impacts to FMMP-Designated Land – Alternative B

									<u>-</u>	Acreage									
			Tempe	orary Impac	t to FMMP	-Designated	d Land ^a						Permanent	Impact to I	FMMP-Desi	gnated Lan	d ^b		
Project Facility	D	G	L	LP	Р	s	U	Х	DU	D	G	L	LP	P	S	U	w	х	DU
Sites Reservoir Inundation Area. Sites Reservoir Dams, and South Bridge ^c	0	С	С	С	0	0	0	С	15,414 ^c	0	1,015	12,120	1,145	0	0	0	0	134	0
Recreation Areas	0	232	811	61	0	0	0	66	0	0	232	811	61	0	0	0	0	66	0
Road Relocations and TRR Pipeline Road	0	137	672	83	0	0	0	O _d	0	0	53	208	29	0	0	O _d	0	O _d	0
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant	0	O _e	O _e	O _e	O _e	0	O _e	Oe	0	0	0	89	0	0	0	0	0	0	0
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	O ^e	O ^e	Oe	O _e	O _e	0	O _e	O ^e	0	0	0	233	0	115	0	0	0	0	0
GCID Canal Facilities Modifications	1	0	O _d	0	O _d	O ^d	0	3	0	O ^d	0	O _d	0	O _d	O _d	0	0	1	0
TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, and TRR Electrical Switchyard	0	0	O _e	0	Oe	0	0	O _e	0	0	0	1	0	194	0	0	0	Oq	0
Delevan Pipeline and TRR Pipeline	0	0	46	0	964	0	1,011	54	0	0	0	0	0	0	0	0	0	0	0
Delevan Transmission Line ^f	0	0	54	0	0	0	0	0	0	0	0	f	0	0	0	0	0	0	1 ^f
Delevan Pipeline Discharge Facility	0	0	0	0	0e	0	0	O _e	0	0	0	0	0	4	0	0	0	3	0
Electrical Distribution Lines	0	0.	25	0	0	0	0	O _d	0	0	0	0	0	0	0	0	0	0	0
Project Buffer	0	0	0	0	0	0	0	0	0	0	1,301	8,052	179	293	0	7	3	83	0
TOTAL	1	369 ^c	1,608°	144 ^c	965	0 ^d	1,011	124 ^c	15,414°	0 ^d	2,601	21,514 ^f	1,414	607	0 ^d	7	3	286	1 ^f

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed in this table or Table 20-21.

^fA total of 0.5 acre would be permanently disturbed from transmission line poles, but due to pole locations being currently unknown, the affected FMMP category cannot currently be determined. Therefore, 0.5 acre of land more than the total listed in Long-Term Impacts would be permanently affected.

Notes:

FMMP = Farmland Mapping and Monitoring Program

FMMP Designations:

D = Urban and Built-up Land

DU = Designation Undetermined

G = Grazing Land

L = Farmland of Local Importance

LP = Local Potential Farmland

P = Prime Farmland

S = Farmland of Statewide Importance

U = Unique Farmland

W = Water

X = Other Land

bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed in this table or Table 20-21.

^cFor the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge Project facilities grouping, a total of 15,414 acres would be temporarily affected during Project construction. The acreage cannot be assigned to a specific FMMP category because the 1,000 acres of construction disturbance area that would be located outside of the Sites Reservoir footprint have not been defined.

^dThere is less than one acre in these categories, but more than zero.

eThe numbers for parcels and acreages of temporary impacts for this Project facility grouping are zero because they are within and already accounted for under the numbers for parcels and acreages of temporary impacts for another Project facility grouping.

Table 20-23 provides a summary comparison of land use impacts for Alternative B and Alternative A.

Table 20-23
Land Use Summary: Alternative B Compared to Alternative A^a

	Altern	ative B	Altern	ative A
Descriptor	Temporary Impacts	Permanent Impacts	Temporary Impacts	Permanent Impacts
Number of Potentially Affected Parcels	277	210	274	209
Acreage of Potentially Affected Parcels	19,637	26,424	17,680	26,425
Zoning Designation of Potentially Affected Parcels (Acres)				
Agricultural Preserve Exclusive Agriculture Foothill Agriculture/Forestry Floodway Intensive Agriculture Light or Heavy Industrial N/A No Information Available	2,100 2,055 0 0 0 19 43 0	24,753 1,030 450 15 0 0 174	2,095 2,055 0 0 0 19 42 0	24,752 1,030 450 14 0 0 175
Designation Undetermined	15,419	1	13,469	3
Total	19,637	26,424	17,680	26,425
FMMP Designation of Potentially Affected Parcels (Acres)				
Urban and Built-up Land Grazing Land Farmland of Local Importance Local Potential Farmland Prime Farmland Farmland of Statewide Importance Unique Farmland Water Other Land Designation Undetermined Total Number of Potentially Affected Parcels with Williamson Act Contracts	1 369 1,608 144 965 0° 1,011 0 124 15,414 19,637	0° 2,601 21,514 ^b 1,414 607 0° 7 3 286 1 ^b 26,424	1 360 1,622 148 960 0° 1,001 0 124 13,464 17,680	0 2,594 21,515 ^b 1,410 606 ^b 0 ^c 7 3 287 3 ^b 26,425
Acreage of Potentially Affected Parcels with Williamson Act Contracts	16,126	22,687	14,362	22,688
Number of Potentially Affected Parcels with WRP Easements	1	0	1	0
Number of Potentially Affected Acres with WRP Easements	5	0	7	0

^aTotals may not match due to the rounding of individual acreages that comprise the totals.

Notes

FMMP = Farmland Mapping and Monitoring Program

WRP = Wetland Reserve Program

^bA total of 2.5 acres under Alternative A and 0.5 acres under Alternative B would be permanently disturbed from transmission line poles, but due to pole locations being currently unknown, the affected FMMP category cannot currently be determined. Therefore, 2.5 acres under Alternative A and 0.5 acres under Alternative B of land more than the total listed in Long-Term Impacts would be permanently affected.

^CThere is less than one acre in these categories, but more than zero.

20.3.8 Impacts Associated with Alternative C

20.3.8.1 Extended Study Area - Alternative C

Construction, Operation, and Maintenance Impacts

The impacts associated with Alternative C, as they relate to established communities (Impact Land-1); potential conflicts with land use plans, policies or regulations (Impact Land-2); compatibility with existing land uses adjacent to proposed Project facilities (Impact Land-3); effects on FMMP designated land uses (Impact Land-4); consistency with existing zoning, or effects on parcels that have Williamson Act contracts (Impact Land 5); consistency with forest land zoning (Impact Land-6) or effects on forest land (Impact Land-7); and other changes in the environment that could convert farmland or forest land to other uses (Impact Land-8); would be the same as described for Alternative A for the Extended Study Area.

20.3.8.2 Secondary Study Area - Alternative C

Construction, Operation, and Maintenance Impacts

The impacts associated with Alternative C, as they relate to established communities (Impact Land-1); potential conflicts with land use plans, policies or regulations (Impact Land-2); compatibility with existing land uses adjacent to proposed Project facilities (Impact Land-3); effects on FMMP designated land uses (Impact Land-4); consistency with existing zoning, or effects on parcels that have Williamson Act contracts (Impact Land-5); consistency with forest land zoning (Impact Land-6) or effects on forest land (Impact Land-7); and other changes in the environment that could convert farmland or forest land to other uses (Impact Land-8); would be the same as described for Alternative A for the Secondary Study Area.

20.3.8.3 Primary Study Area - Alternative C

Construction, Operation, and Maintenance Impacts

The following Primary Study Area Project facilities are included in Alternatives A, B, and C. These facilities would require the same construction methods and operation and maintenance activities regardless of alternative, and would, therefore, result in the same construction, operation, and maintenance impacts to land use:

- Recreation Areas
- Sites Pumping/Generating Plant
- Sites Electrical Switchyard
- Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure
- Sites Reservoir Inlet/Outlet Structure
- Field Office Maintenance Yard
- Holthouse Reservoir Complex
- Holthouse Reservoir Electrical Switchyard
- GCID Canal Facilities Modifications
- GCID Canal Connection to the TRR
- TRR
- TRR Pumping/Generating Plant
- TRR Electrical Switchyard
- TRR Pipeline
- TRR Pipeline Road

- Delevan Pipeline
- Delevan Pipeline Electrical Switchyard

The Alternative C design of the Delevan Transmission Line and Delevan Pipeline Intake Facilities is the same as described for Alternative A. These facilities would require the same construction methods and operation and maintenance activities regardless of alternative, and would, therefore, result in the same construction, operation, and maintenance impacts to land use as described for Alternative A.

The Alternative C design of the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge; the Road Relocations and TRR Pipeline Road; and the Electrical Distribution Lines is the same as described for Alternative B. These facilities would require the same construction methods and operation and maintenance activities regardless of alternative, and would, therefore, result in the same construction, operation, and maintenance impacts to land use as described for Alternative B.

Provided below in Table 20-24 is a summary of the potential temporary and permanent land use changes that are expected to occur as a result of the Project Buffer. The boundary of the Project Buffer would be the same for all alternatives, but because the footprints of some of the Project facilities that are surrounded by the Project Buffer would differ between the alternatives, the acreage of land within the Project Buffer would also differ. However, this difference in the size of the area included within the buffer would not change the type of construction, operation, and maintenance activities that were described for Alternative A. They would, therefore, have the same impact on established communities (Impact Land-1); potential conflicts with land use plans, policies or regulations (Impact Land-2); compatibility with existing land uses adjacent to proposed Project facilities (Impact Land-3); effects on FMMP designated land uses (Impact Land-4); consistency with existing zoning, or effects on parcels that have Williamson Act contracts (Impact Land-5); consistency with forest land zoning (Impact Land-6) or effects on forest land (Impact Land-7); and other changes in the environment that could convert farmland or forest land to other uses (Impact Land-8) as described for Alternative A.

Project Buffer

Table 20-24 provides a summary of the potential temporary and permanent land use changes that are expected to occur as a result of the Alternative C Project Buffer.

Table 20-24
Project Buffer – Alternative C
Land Use Summary

Descriptor	Temporary Impacts	Permanent Impacts*
Number of Potentially Affected Parcels		
Glenn County	0	10
Colusa County	0	98
Total	0	108
Acreage of Potentially Affected Parcels		
Glenn County	0	1,479
Colusa County	0	8,418
Total	0	9,897

Table 20-24 Project Buffer – Alternative C Land Use Summary

Descriptor	Temporary Impacts	Permanent Impacts*
Zoning Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Agricultural Preserve (144-acre minimum)		1,292
Foothill Agricultural/Forestry (144-acre minimum)		180
Colusa County		
Agriculture Preserve		7,846
Exclusive Agriculture		532
Foothill Agricultural/Forestry (144-acre minimum)		3
Floodway N/A		10 34
Total	0	.
1 0 0 0 1	U	9,897
FMMP Designation of Potentially Affected Parcels (Acres)		
Glenn County		
Local Potential Farmland		179
Grazing Land Other Land		1,292
		1
Colusa County		00.4
Prime Farmland Unique Farmland		284 7
Farmland of Local Importance		8,052
Water		3
Other Land		79
Total	0	9,897
Number of Potentially Affected Parcels with Williamson Act		
Contracts		
Glenn County	0	8
Colusa County	0	69
Total	0	77
Acreage of Potentially Affected Parcels with Williamson Act Contracts		
Glenn County	0	1,296
Colusa County	0	7,265
Total	0	8,561
Number of Potentially Affected Parcels with WRP Easements	0	0
Number of Potentially Affected Acres with WRP Easements	0	0

^{*}All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes

FMMP = Farmland Mapping and Monitoring Program

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County)

WRP = Wetland Reserve Program

20.3.8.4 Summary of Alternative C Land Use Impacts

Table 20-25 provides a summary of the number of potentially affected parcels, the acreage of those parcels, the zoning designations, the number of parcels and acreage of parcels with Williamson Act contracts, and the number of parcels and acreage of parcels with WRP easements for Alternative C.

Table 20-25
Summary of Land Use Impacts – Alternative C

		otentially I Parcels		Potentially Parcels		esignation of F ffected Acreag		Parcels with	tially Affected h Williamson ontracts	Affected	otentially Acres with Act Contracts	Affected P	otentially arcels with sements	Affected Acr	otentially es with WRP ments
Project Facility	Temp. ^a	Perm.b	Temp.ª	Perm.b	Desig.	Temp.a	Perm.b	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Temp. ^a	Perm.b	Temp.a	Perm.b
Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge	159	147	15,414	14,414	AP1 AP2 EA FA-F N/A DU	15,414 ^d	1,907 12,079 33 267 128 0	95	83	13,650	12,650	0	0	0	0
Recreation Areas	15	15	1,170	1,170	AP1 AP2	293 877	293 877	14	14	1,121	1,121	0	0	0	0
Road Relocations and TRR Pipeline Road	53	51	893	289	AP1 AP2 N/A	204 670 19	70 208 11	48	47	851	270	0	0	0	0
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant	0e	7	Oe	89	AP2	Oe	89	Oe	6	Oe	79	0	0	0	0
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	O _e	14	O _e	348	AP2 EA	O _e	92 256	O _e	3	O ^e	5	0	0	0	0
GCID Canal Facilities Modifications	0	3	5	1	NL IA DU	5 ^d	1 0 0	0	0	0	0	0	0	0	0
TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, and TRR Electrical Switchyard	O _e	9	0e	195	EA N/A	O _e	194 1	0e	0	O _e	0	0	0	0	0
Delevan Pipeline and TRR Pipeline	64	0	2,058	0	EA LHI N/A	2,015 19 24	0 0 0	11	0	425	0	1°	0	5	0
Delevan Transmission Line	12	39	71	3	AP2 EA DU	31 40 0	3	7	11	54	3	1°	0	2	0
Delevan Pipeline Intake Facilities	O ^e	2	O _e	19	EA F	0e 0e	15 4	0	0	0	0	0	0	0	0
Electrical Distribution Lines	14	14	25	0	AP2	25	0	14	14	25	0	0	0	0	0
Project Buffer	0	108	0	9,897	AP1 AP2 EA F FA-F N/A		1,292 7,846 532 10 183 34	0	77	0	8,561	0	0	0	0
TOTAL	278 ^f	209 ^f	19,636	26,425		19,636	26,425	136 ^f	113 ^f	16,126	22,689	1	0	7	0

Table 20-25 Summary of Land Use Impacts – Alternative C

		otentially I Parcels		Potentially Parcels		esignation of I		Parcels with	tially Affected h Williamson ontracts	Affected	Potentially Acres with Act Contracts	No. of Potentially Affected Parcels with WRP Easements		No. of Potentially Affected Acres with WRP Easements	
Project Facility	Temp.a	Perm.b	Temp.ª	Perm.b	Desig.	Temp.ª	Perm.b	Temp.ª	Perm.b	Temp.ª	Perm.b	Temp.ª	Perm.b	Temp.a	Perm.b

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

Notes:

Desig. = Designation

Perm. = Permanent

Temp. = Temporary

WRP = Wetland Reserve Program

Zoning Designations:

AP1 = Agricultural Preserve (Glenn County)

AP2 = Agriculture Preserve (Colusa County)

DU = Designation Undetermined

EA = Exclusive Agriculture

F = Floodway

FA-F = Foothill Agricultural/Forestry

IA = Intensive Agriculture

LHI = Light or Heavy Industrial

N/A = There is no County zoning designation (e.g., the area is located in a roadway corridor that is not officially zoned by the County).

NL = No Information Available

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed.

^cThere is one parcel total with a WRP easement that would be affected.

^dThe subtotals by designations of acreages of temporary impacts cannot be determined because it is unknown which parcels would comprise the complete construction disturbance area.

The numbers for parcels and acreages of temporary impacts for this Project facility grouping are zero because they are within and already accounted for under the numbers for parcels and acreages of temporary impacts for another Project facility grouping.

The parcel totals are the count of distinct parcels across all Project facility groupings considered in the analysis (i.e. the total count does not represent the sum of column, as one parcel could be affected by several facilities). Therefore, these totals assume the worst case impact.

Table 20-26 provides a summary of impacts to FMMP-designated land for Alternative C.

Table 20-26
Summary of Impacts to FMMP-Designated Land – Alternative C

,										Acreage									
			Tempo	orary Impac	t to FMMP-	Designate	d Land ^a					F	Permanent	mpact to F	MMP-Desig	nated Land	b		
Project Facility	D	G	L	LP	Р	S	U	Х	DU	D	G	L	LP	Р	s	U	w	Х	DU
Sites Reservoir Inundation Area. Sites Reservoir Dams, and South Bridge ^c	0	С	С	С	0	0	0	С	15,414°	0	1,015	12,120	1,145	0	0	0	0	134	0
Recreation Areas	0	232	811	61	0	0	0	66	0	0	232	811	61	0	0	0	0	66	0
Road Relocations and TRR Pipeline Road	0	137	672	83	0	0	0	O ^d	0	0	53	208	29	0	0	O ^d	0	O ^d	0
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, and Asphalt Batch Plant	0	0e	0e	0e	O _e	0	0e	O _e	0	0	0	89	0	0	0	0	0	0	0
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	O _e	O _e	O _e	O _e	O _e	0	Oe	Oe	0	0	0	233	0	115	0	0	0	0	0
GCID Canal Facilities Modifications	1	0	O _d	0	O _d	O _d	0	3	0	O _d	0	O _q	0	O _q	Od	0	0	1	0
TRR, TRR Pumping/Generating Plant, GCID Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, and TRR Electrical Switchyard	0	0	Oe	0	O _e	0	0	Oe	0	0	0	1	0	194	0	0	0	Oq	0
Delevan Pipeline and TRR Pipeline	0	0	46	0	957	0	1,001	54	0	0	0	0	0	0	0	0	0	0	0
Delevan Transmission Linef	0	0	70	0	2	0	0	0	0	0	0	f	0	f	0	0	0	0	3 ^f
Delevan Pipeline Intake Facilities	0	0	0	0	O ^e	0	0	Oe	0	0	0	0	0	13	0	0	0	6	0
Electrical Distribution Lines	0	0.	25	0	0	0	0	O ^d	0	0	0	0	0	0	0	0	0	0	0
Project Buffer	0	0	0	0	0	0	0	0	0	0	1,301	8,052	179	284	0	7	3	80	0
TOTAL	1	369°	1,624°	144 ^c	960	0 ^d	1,001	123°	15,414 ^c	0 ^d	2,601	21,514 ^f	1,414	606 ^f	0 ^d	7	3	287	3 ^f

Table 20-26 Summary of Impacts to FMMP-Designated Land – Alternative C

		Julianian, or impacto to thirm postgration party of																	
		Acreage																	
			Temp	orary Impac	t to FMMP	-Designated	d Land ^a		Permanent Impact to FMMP-Designated Land ^b										
Project Facility	D	G	L	LP	Р	s	U	х	DU	D	G	L	LP	Р	s	U	w	Х	DU

^aAcreage of temporary impacts consist of the Project facility footprints plus the associated construction disturbance area. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed in this table or Table 20-25.

Notes:

FMMP = Farmland Mapping and Monitoring Program

FMMP Designations:

D = Urban and Built-up Land

G = Grazing Land

L = Farmland of Local Importance

LP = Local Potential Farmland

P = Prime Farmland

S = Farmland of Statewide Importance

U = Unique Farmland

W = Water X = Other Land

DU = Designation Undetermined

^bAcreage of permanent impacts consist of the Project facility footprints. All numbers have been rounded to the acre. Due to rounding of all acreages listed in this table, individual acreages may not add up to the total acreages listed in this table or Table 20-25.

^cFor the Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge Project facilities grouping, a total of 15,414 acres would be temporarily affected during Project construction. The acreage cannot be assigned to a specific FMMP category because the 1,000 acres of construction disturbance area that would be located outside of the Sites Reservoir footprint have not been defined.

^dThere is less than one acre in these categories, but more than zero.

eThe numbers for parcels and acreages of temporary impacts for this Project facility grouping are zero because they are within and already accounted for under the numbers for parcels and acreages of temporary impacts for another Project facility grouping.

^fA total of 2.5 acre would be permanently disturbed from transmission line poles, but due to pole locations being currently unknown, the affected FMMP category cannot currently be determined. Therefore, 2.5 acre of land more than the total listed in Long-Term Impacts would be permanently affected.

Table 20-27 provides a summary comparison of land use impacts for Alternative C and Alternative A.

Table 20-27
Land Use Summary: Alternative C Compared to Alternative A^a

	Altern	ative C	Altern	ative A
Descriptor	Temporary Impacts	Permanent Impacts	Temporary Impacts	Permanent Impacts
Number of Potentially Affected Parcels	278	209	274	209
Acreage of Potentially Affected Parcels	19,636	26,425	17,680	26,425
Zoning Designation of Potentially Affected Parcels (Acres)				
Agricultural Preserve Exclusive Agriculture Foothill Agriculture/Forestry Floodway Intensive Agriculture Light or Heavy Industrial N/A No Information Available	2,100 2,055 0 0 0 19 43	24,753 1,030 450 14 0 0 174	2,095 2,055 0 0 0 19 42	24,752 1,030 450 14 0 0 175
Designation Undetermined	15,419	3	13,469	3
Total FMMP Designation of Potentially Affected Parcels (Acres) Urban and Built-up Land Grazing Land Farmland of Local Importance Local Potential Farmland Prime Farmland Farmland of Statewide Importance Unique Farmland Water Other Land Designation Undetermined	19,636 1 369 1,624 144 960 0° 1,001 0 123 15,414	0° 2,601 21,514 ^b 1,414 606 ^b 0° 7 3 287 3 ^b	17,680 1 360 1,622 148 960 0° 1,001 0 124 13,464	0 2,594 21,515 ^b 1,410 606 ^b 0 ^c 7 3 287 3 ^b
Total	19,636	26,425	17,680	26,425
Number of Potentially Affected Parcels with Williamson Act Contracts	136	113	133	113
Acreage of Potentially Affected Parcels with Williamson Act Contracts	16,126	22,689	14,362	22,688
Number of Potentially Affected Parcels with WRP Easements	1	0	1	0
Number of Potentially Affected Acres with WRP Easements	7	0	7	0

^aTotals may not match due to the rounding of individual acreages that comprise the totals.

Notes

FMMP = Farmland Mapping and Monitoring Program

WRP = Wetland Reserve Program

20.4 Mitigation Measures

Mitigation measures are provided below and summarized in Table 20-28 for the impacts that have been identified as significant or potentially significant.

^bA total of 2.5 acres would under Alternative A and C would be permanently disturbed from transmission line poles, but due to pole locations being currently unknown, the affected FMMP category cannot currently be determined. Therefore, 2.5 acres under Alternative A and C of land more than the total listed in Long-Term Impacts would be permanently affected.

^cThere is less than one acre in these categories, but more than zero.

Table 20-28
Summary of Mitigation Measures for NODOS Project Impacts to Land Use

Impact	Associated Project Facility	LOS Before Mitigation	Mitigation Measure	LOS After Mitigation
Impact Land-1: Physical Division of an Established Community	Sites Reservoir Inundation Area and Sites Reservoir Dams (construction, operation, and maintenance effects on the Town of Sites)	Significant	No feasible mitigation	Significant and Unavoidable
Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	Sites Reservoir Inundation Area and Sites Reservoir Dams, Saddle Dam Recreation Area, Road Relocations, Project Buffer (construction, operation, and maintenance)	Significant in Glenn County	Mitigation Measure Land-2a: To the Extent Possible, Work with Glenn County to Encourage the County to Modify or Amend the Glenn County General Plan to Bring it into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable
	Delevan Transmission Line, Delevan Pipeline (construction, operation, and maintenance)	Significant	Mitigation Measure Land-2b: Execute an Agreement with NRCS to Amend WRP Easement Contract and Conduct Post-Construction Wetland Restoration	Less than Significant
Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to Proposed Project Facilities	Delevan Pipeline, TRR Pipeline, Delevan Transmission Line, Delevan Pipeline Intake Facilities, Delevan Pipeline Discharge Facility, Electrical Distribution Lines (construction)	Significant	Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant
	Sites Reservoir Inundation Area and Sites Reservoir Dams (construction effects on Sites Cemetery and the Rancheria Cemetery)	Significant	Mitigation Measure Cul-4a: Relocation of Known Cemeteries	Less than Significant
	Sites Reservoir Inundation Area (construction, operation, and maintenance effects on the Town of Sites)	Significant	Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable

Table 20-28
Summary of Mitigation Measures for NODOS Project Impacts to Land Use

Impact	Associated Project Facility	LOS Before Mitigation	Mitigation Measure	LOS After Mitigation
	Delevan Pipeline Intake Facilities, Delevan Pipeline Discharge Facility (construction, operation, and maintenance)	Potentially Significant	Mitigation Measure Land-3b: Execute an Agreement with Maxwell Irrigation District to Minimize and Avoid Short-Term and Long-Term Impacts to Existing Facilities and Operations	Less than Significant
Impact Land-3: Changes in Land Use as a Result of Implementing the Alternatives that are Considered to be Incompatible with the Existing and General Plan Designated Land Uses at and Adjacent to Proposed Project Facilities	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations; South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; TRR; TRR Pumping/Generating Plant; GCID Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline Intake Facilities; Delevan Pipeline Discharge Facility (construction, operation, and maintenance)	Significant	Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable
	Delevan Pipeline and TRR Pipeline, Delevan Transmission Line, Electrical Distribution Lines (construction)	Significant	Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with Proposed Project Land Uses	Less than Significant or Significant and Unavoidable
Impact Land-4: Permanent Conversion of Prime Farmland, as Shown on the Maps Prepared Pursuant to the FMMP of the California Natural Resources Agency, Department of Conservation, to Non-Agricultural Use	Road Relocations, South Bridge, and TRR Pipeline Road (Colusa County); Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; TRR; TRR Pumping/Generating Plant; GCID Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline Intake Facilities; Delevan Pipeline Discharge Facility (operation and maintenance)	Significant	Mitigation Measure Land-4a: Enter into Agricultural Conservation Easements with Glenn and Colusa Counties	Less than Significant

Table 20-28
Summary of Mitigation Measures for NODOS Project Impacts to Land Use

Impact	Associated Project Facility	LOS Before Mitigation	Mitigation Measure	LOS After Mitigation
Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations, South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; TRR; Pumping/Generating Plant; GCID Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline Intake Facilities; Delevan Pipeline Discharge Facility; Project Buffer (operation and maintenance)	Significant	Mitigation Measure Land-5a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Zoning Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable
Impact Land-5: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations, South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; Delevan Pipeline Discharge Facility; Electrical Distribution Lines; Project Buffer (operation and maintenance)	Significant	Mitigation Measure Land-5b: Acquire Lands Through Eminent Domain Mitigation Measure Land-5c: For Land Permanently Acquired other than by Eminent Domain, Seek County Approvals to Rescind Williamson Act Contracts and Enter in Open Space Contracts or Open Space Easements	Less than Significant Less than Significant or Significant and Unavoidable

Table 20-28
Summary of Mitigation Measures for NODOS Project Impacts to Land Use

Impact	Associated Project Facility	LOS Before Mitigation	Mitigation Measure	LOS After Mitigation
Impact Land-6: Permanent Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations, South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; Delevan Transmission Line; Project Buffer (operation and maintenance)	Significant	Mitigation Measure Land-5a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Zoning Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable
Impact Land-7: The Permanent Loss of Forest Land or Permanent Conversion of Forest Land to Non-Forest Use	Sites Reservoir Inundation Area and Sites Reservoir Dams, Recreation Areas, Project Buffer (operation and maintenance)	Significant	Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable
Impact Land-8: Other Changes in the Environment which, due to their Location or Nature, could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations, South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; TRR; TRR Pumping/Generating Plant; GCID Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline and TRR Pipeline; Delevan Transmission Line; Delevan Pipeline Intake Facilities; Delevan Pipeline Discharge Facility; Project Buffer (operation and maintenance)	Significant	Mitigation Measure Land-4a: Enter into Agricultural Conservation Easements with Glenn and Colusa Counties	Less than Significant

Table 20-28
Summary of Mitigation Measures for NODOS Project Impacts to Land Use

Impact	Associated Project Facility	LOS Before Mitigation	Mitigation Measure	LOS After Mitigation
Impact Land-8: Other Changes in the Environment which, due to their Location or Nature, could Result in the Permanent Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Local Potential Farmland to Non-Agricultural Use or Permanent Conversion of Forest Land to Non-Forest Use	Sites Reservoir Inundation Area, Sites Reservoir Dams, Project Buffer (operation and maintenance)		Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with the Proposed Project Land Uses	Less than Significant or Significant and Unavoidable

[&]quot;Temporary" impacts, as discussed in this chapter, are the "construction" impacts listed in this table. "Permanent" impacts, as discussed in this chapter, are the "operation and/or maintenance" impacts listed in this table.

Note:

LOS = Level of Significance

Mitigation Measure Land-2a: To the Extent Possible, Work with Glenn County to Encourage the County to Modify or Amend the Glenn County General Plan to Bring it into Consistency with the Proposed Project Land Uses

Prior to the start of Project construction, DWR and Reclamation shall, to the extent possible, work with Glenn County to modify or amend its General Plan for consistency with proposed Project land uses, or to implement other appropriate measures to minimize conflicts between the Project and County policies.

Mitigation Measure Land-2b: Execute an Agreement with NRCS to Amend WRP Easement Contract and Conduct Post-Construction Wetland Restoration

Prior to the start of Project construction, DWR and Reclamation shall execute an agreement with NRCS to amend the existing WRP easement contract to allow the construction and operation of the Delevan Transmission Line and Delevan Pipeline. Project Engineers shall design the transmission line and the construction contractor shall install the transmission line tower footings to span the parcel of land that has the WRP easement (a distance of approximately 680 feet). Project Engineers shall design the pipeline and the construction contractor shall install the pipeline to avoid the wetlands in the subject parcel of land, to the extent feasible. The pipeline length across the subject parcel is approximately 650 feet. Upon completion of pipeline installation, the area that was disturbed by Project construction shall be restored to a functional wetland condition.

Mitigation Measure Cul-4a: Relocation of Known Cemeteries

Consultation shall occur with the entity (County, City, private) that has jurisdiction over the cemetery, and interested parties as appropriate, to identify a satisfactory place that is protected from future disturbance for the relocation of human remains. Similarly, if Native American burials are known to exist in an archaeological site, the Project proponent shall work with the appropriate tribe to identify a satisfactory location for re-interment of burials in a protected location.

Mitigation Measure Land-3a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Land Use Designations to Bring them into Consistency with the Proposed Project Land Uses

Prior to the start of Project construction, DWR and Reclamation shall, to the extent possible, work with Glenn and Colusa counties to modify or amend the counties' General Plan land use designations, or to implement other appropriate measures to eliminate the Project's conflicts with those designations.

Mitigation Measure Land-3b: Execute an Agreement with Maxwell Irrigation District to Minimize and Avoid Short-term and Long-Term Impacts to Existing Facilities and Operations

Prior to the start of Project construction, DWR and Reclamation shall execute an agreement with the Maxwell Irrigation District to ensure that Project construction and operation of the Delevan Pipeline Intake Facilities or the Delevan Pipeline Discharge Facility will not adversely affect the operation of the existing adjacent Maxwell Irrigation District facility.

Mitigation Measure Land-4a: Enter into Agricultural Conservation Easements with Glenn and Colusa Counties

DWR and Reclamation shall enter into agricultural conservation easements with Glenn and Colusa counties **for** lands used for agricultural production to ensure agriculture remains viable in perpetuity and to prevent incompatible development on the selected parcels.

Mitigation Measure Land-5a: To the Extent Possible, Work with Glenn and Colusa Counties to Encourage the Counties to Modify or Amend the Glenn County and Colusa County General Plans' Zoning Designations to Bring them into Consistency with the Proposed Project Land Uses

Prior to the start of Project construction, DWR and Reclamation shall, to the extent possible, work with Glenn and Colusa counties to modify or amend the counties' zoning designations, or to implement other appropriate measures to eliminate the Project's conflicts with those designations.

Mitigation Measure Land-5b: Acquire Lands through Eminent Domain

During the Project land acquisition process, DWR and Reclamation shall acquire parcels through eminent domain.

Mitigation Measure Land-5c: For Land Permanently Acquired other than by Eminent Domain, Seek County Approvals to Rescind Williamson Act Contracts and Enter into Open Space Contracts or Open Space Easements

Prior to permanently acquiring lands other than by eminent domain during the land acquisition process, DWR and Reclamation shall seek County approvals to rescind Williamson Act Contracts and enter into Open Space Use Agreements or Open Space Easements with the counties.

There is no feasible mitigation for **Impact Land-1** as it relates to the Town of Sites, so it is considered significant and unavoidable.

Implementation of Mitigation Measures Land-2b, 3a (for some Project facilities), 3b, 4a, 5b, and Cul-4a, would reduce the level of significance of Project impacts to less than significant.

Implementation of **Mitigation Measures Land-2a**, **3a** (for some Project facilities), **5a**, and **5c** would reduce the level of significance of Project impacts to less than significant if DWR and Reclamation are successful in working with the counties regarding consistency with the General Plans, General Plan land use designations, General Plan zoning designations, and/or regarding Williamson Act contracts. If working with the counties does not result in the Project being consistent with the counties' General Plans, General Plan land use designations, General Plan zoning designations, and/or regarding Williamson Act contracts, these impacts are considered **significant and unavoidable**.

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